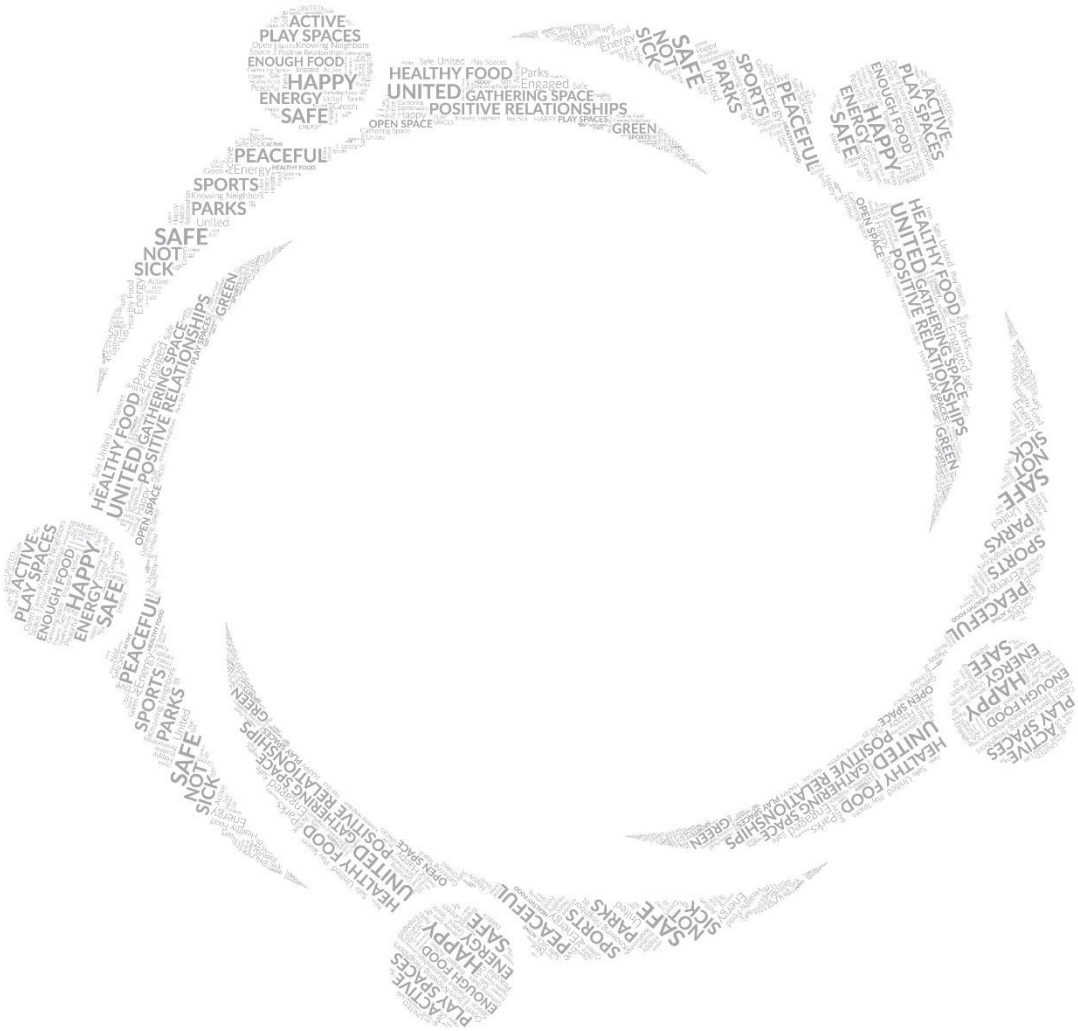

DANVILLE - PITTSYLVANIA COMMUNITY HEALTH NEEDS ASSESSMENT

2016 -2017

"Lofty goals do not come to fruition by simply dreaming. They require the collaborative efforts of stakeholders who are willing to build capacity, identify champions, develop inclusive leaders and engage the community. This work is not accidental. It must be strategic and intentional."

- Laurie S. Moran

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Disclaimer

The Danville & Pittsylvania County Community Health Needs Assessment and Dan River Region Health Equity Report were conducted to benefit the community. The Health Collaborative, and its partners encourage the use of these reports as a tool for health planning, policy creation and decision making. At the time of production, all data cited was current. However, some sources may have published new data. To ensure the use of the most up-to-date information, please check the data source for any updates that might have been released. For questions, please contact Elyse Jardine, Project Manager for The Health Collaborative at elyse@thehealthcollab.com or 434-799-2176.

Acknowledgements

The Danville & Pittsylvania County Community Health Needs Assessment and Dan River Region Health Equity Report, would not have been possible without the support of a wide-range of community partners. In addition to those listed below, we also want to thank those who participated in the community health survey, focus groups and key informant interviews.

Funders

- Centra
- Danville Regional Foundation
- SOVAH Health Danville (Danville Regional Medical Center)

Principal Partners

- Centra
- Danville Regional Foundation
- SOVAH Health Danville (Danville Regional Medical Center)
- Institute for Public Health Innovation
- The Health Collaborative

Project Management

- Elyse Jardine, Project Manager—The Health Collaborative & Institute for Public Health Innovation

Community Health Needs Assessment Steering Committee

- Kim Bond, Centra
- Susan DeFrancesco, Institute for Public Health Innovation
- Wendi Goods Everson, Danville Regional Foundation
- Shannon Knight, Centra
- Annie Martinie, Danville Regional Foundation
- Amanda Oakes, Danville – Pittsylvania Community Services
- Alice Obenchain-Leeson, Averett University
- Traci Petty, United Way of Danville – Pittsylvania County
- Bill Sgrinia, City of Danville Parks and Recreation
- Leslie Smith-Sturdivant, SOVAH Health Danville (Danville Regional Medical Center)
- Marcy Williams, Caswell County Health Department
- Jamie Zoellner, University of Virginia

Community Engagement Partners and Supporters

- Danville Pittsylvania County Chamber of Commerce
- City of Danville Parks and Recreation
- God's Storehouse
- Middle Border Forward
- Pittsylvania County Library System
- Danville Public Library
- Right Touch Christian Church
- East New Hope Missionary Baptist Church
- Danville Public Schools Nutrition Staff
- Caswell County Health Department
- Pittsylvania County Parks and Recreation
- The Remnant Church of Power
- Pittsylvania County Community Action
- Danville – Pittsylvania Community Services
- The Health Collaborative
- Danville Register and Bee (News story promoting survey)
- WSET (ABC) 13 (News story promoting survey)

Executive Summary

The decision to conduct a community health needs assessment (CHNA) was an easy one to make. To move forward, the community must first know where it is starting from. To complete this assessment, a set of guiding questions drove the development of the process.

Guiding Questions:

1. What is the current health status of the region?
2. What barriers and inequities exist within and between the communities of the region?
3. What impact do the social determinants of health have on the region?
4. What are key, meaningful indicators through which we can track progress?

To answer these questions a process was designed that included the gathering of secondary health and well-being data combined with multiple community engagement strategies.

Key Components of the Community Health Needs Assessment Process

Needs Assessment Design – Data Collection

Data was collected using a multi-pronged approach. The first prong was the gathering of secondary health and well-being data from sources such as the Virginia Department of Health, North Carolina State Center of Health Statistics, U.S. Census Bureau and the U.S. Department of Agriculture. The second data stream was centered on a community engagement strategy, which included a community health survey, key informant interviews, and focus groups.

Community Engagement Findings

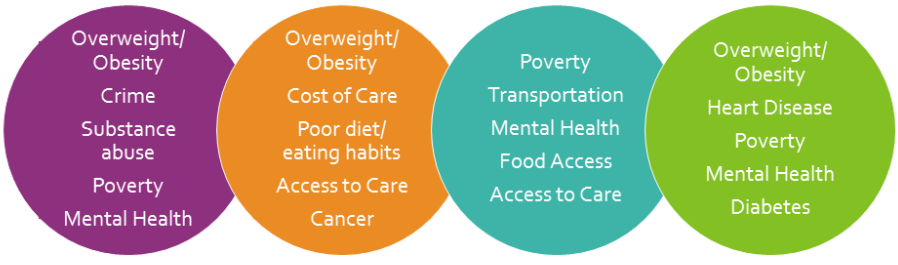
What does a healthy community look like?

Each focus group began with participants describing what a healthy community means to them. Throughout each of the focus groups commons words and themes began to appear. The list and word cloud consists of the most repeated words and phrases that focus group participants associate with good community health.

What factors influence community health?

Throughout all steps of the community engagement process, participants were asked to vote on which issues have the greatest impact on community health.

Below are the top five factors from each phase of the community engagement strategy and the 2015 Caswell County Community Health Assessment.



Top 5 community health issues among Danville Pittsylvania survey respondents

The 5 most important health issues facing Caswell County among 2015 CHA survey respondents

Most common themes stemming from key informant interview question about factors impacting community health

Top 5 health community health issues among focus group participants

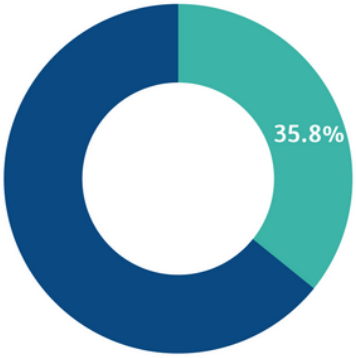
Many of the health issues identified, align with the health and well-being data collected from secondary sources. Below, key findings around obesity, diabetes, cancer and general health information have been incorporated into a regional current health dashboard. More detailed findings around the social determinants of health are included in the Health Equity Report.

Chronic Disease Key Findings: obesity and related conditions

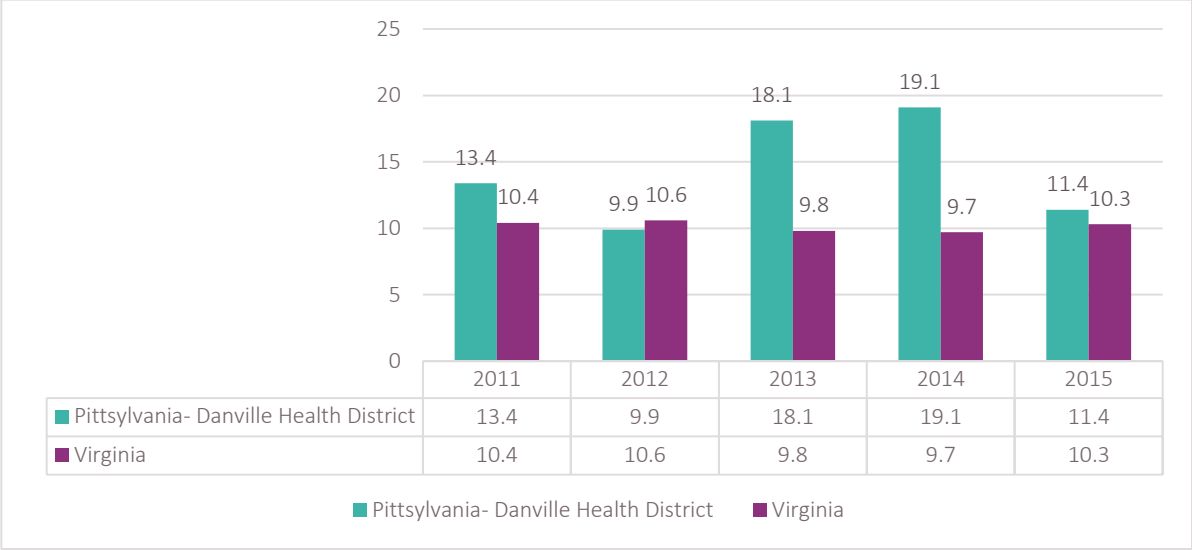
Being overweight or obese can lead to other health complications including diabetes, high blood pressure and certain types of cancer.

In 2015, 3 out of 4 residents aged 18 years or older in the Pittsylvania- Danville Health District were told by a healthcare professional that they were obese or overweight[i]

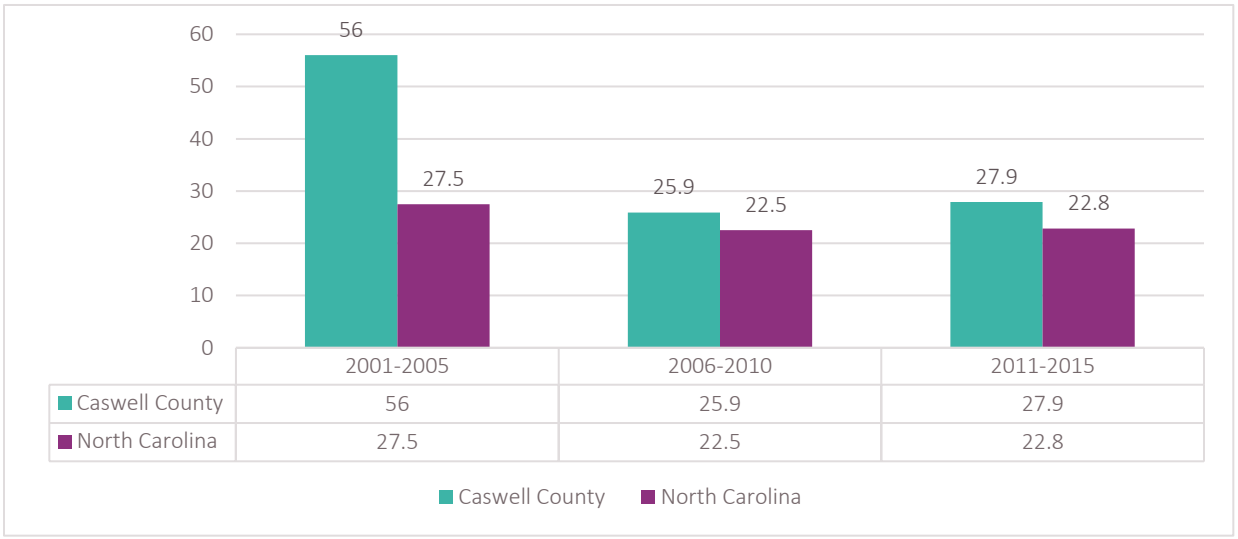
In 2013, 35.8% of adults in Caswell County, NC reproted they had a Body Mass Index of 30 or more[ii].



Percentage of Adults 18 years or older who have been told by a healthcare professional that they have diabetes (2011-2015)[iii].



Caswell County Age-Adjusted Diabetes Death Rates (per 100,000)[iv]



Key Findings: cancer

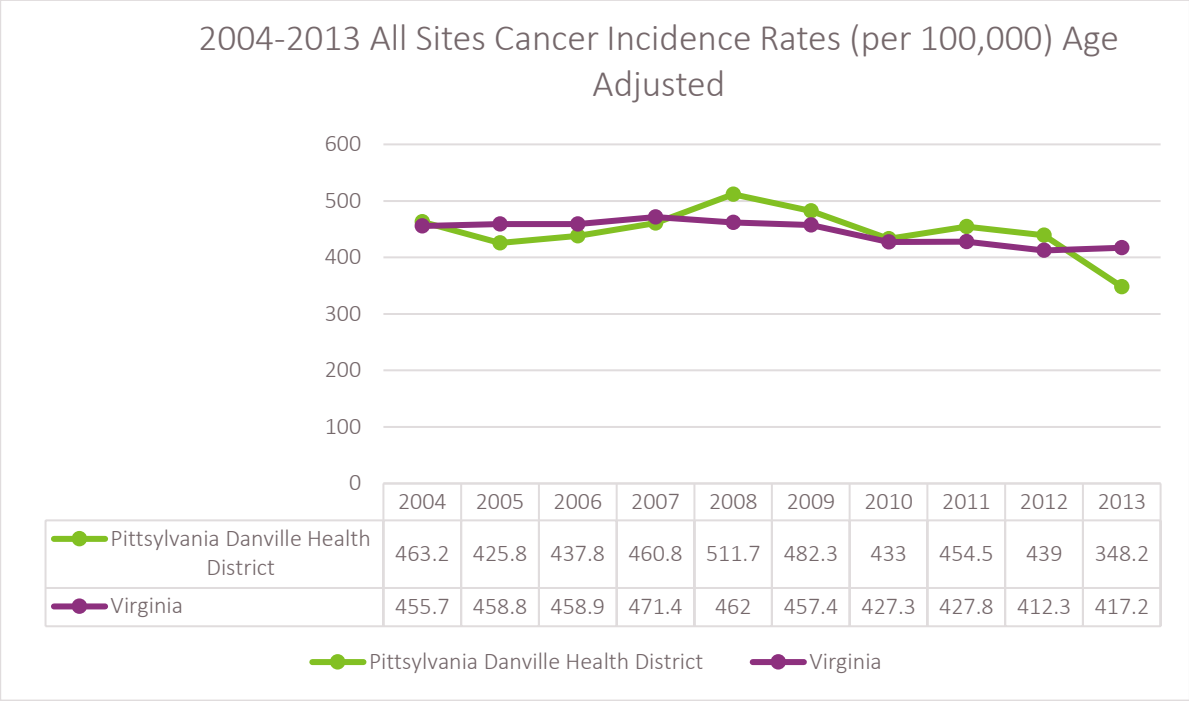
Cancer was the leading cause of death in Caswell County for 2015[v], and Pittsylvania County in 2013. Furthermore, it was the second leading cause of death for Danville in 2013[vi].

In 2013 the Pittsylvania – Danville Health District had a lower cancer incidence rate (all sites) than the state. However, the health district saw higher death rates for that same year. Meaning that cancer is fatal to a greater proportion of residents in the Pittsylvania – Danville Health District, than at the state level.

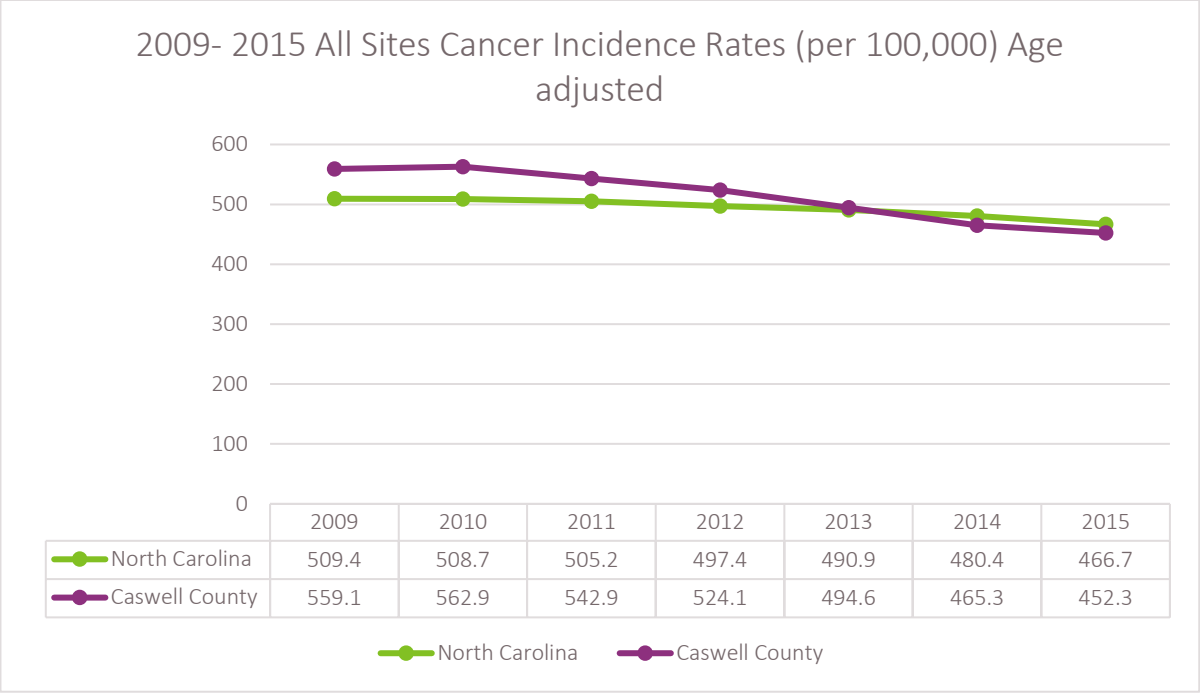
Pittsylvania - Danville HD Cancer Death Rate 2013 (per 100,000)[vii]	State of Virginia Cancer Death Rate 2013 (per 100,000)
189.5	161.3

Much like the Pittsylvania-Danville Health District, Caswell County in 2015, had a lower incidence rate of cancer than the state of North Carolina, but a higher death rate.

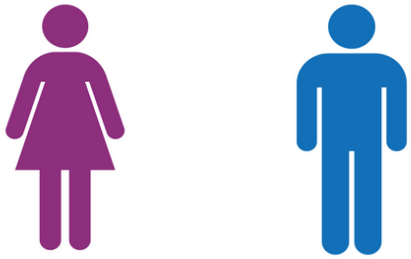
2015 Caswell County Cancer Death Rate (per 100,000) Age Adjusted[viii]	2015 North Carolina Cancer Death Rate (per 100,000) Age Adjusted
200.9	169.2



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pittsylvania Danville Health District	463.2	425.8	437.8	460.8	511.7	482.3	433	454.5	439	348.2
Virginia	455.7	458.8	458.9	471.4	462	457.4	427.3	427.8	412.3	417.2



Age-Adjusted Cancer Death Rates by Sex and Race (2011-2015)



Female All:
Danville 164.4
Pittsylvania 145.7
Caswell 166.6

Female White:
Danville 159.8
Pittsylvania 151.7
Caswell 182.8

Female African American:
Danville 177.5
Pittsylvania 130.4
Caswell 132.8

Male All:
Danville 263.8
Pittsylvania 216.8
Caswell 243.9

Male White:
Danville 250.8
Pittsylvania 210.7
Caswell 240.2

Male African American:
Danville 295.1
Pittsylvania 242.81
Caswell 245.6

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, released December, 2016. Data are from the Multiple Cause of Death Files, 1999-2015, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html

Current Health Status Dashboard

Each spring, the Robert Wood Johnson Foundation in partnership with the University of Wisconsin releases the County Health Rankings. While Danville, Pittsylvania County and Caswell County all improved over their 2016 scores, several health challenges still need to be addressed. In general, the Dan River Region experiences high rates of chronic diseases and low rates participation among positive health behaviors.

2017 County Health Rankings[ix]	
Danville, Virginia	127 out of 133
Pittsylvania County, Virginia	75 out of 133
Caswell County, North Carolina	54 out of 100

Have you ever been told by a health professional that you have high blood pressure?		
	Yes	No
North Carolina Region 5[1] (2015)[x]	31.6%	65.9%
Pittsylvania- Danville Health District (2013) [xi]	36.1&	63.9%

For more information on chronic diseases, turn to page 45.

For more information of health behaviors, turn to page 19.

Adults Consuming less than 5 servings of fruits and vegetables per day	
NC Region 5[xii] (2015)	84.6%
Pittsylvania – Danville Health District[xiii] (2015)	93%

2016 Opioid Emergency Department Visit Rates	
Danville	228.1
Pittsylvania County	51.5
Virginia	103.5

For more information on Opioid Addiction Indicators, turn to page 91.

For more information on maternal and child health indicators, turn to page 86.

Teen Pregnancy Rate[xiv] Per 1,000 Teenagers Age 15-19		
	2013	2014
Danville	55.3	48
Pittsylvania	22.2	22.1
Virginia	27.9	24.84

[1] North Carolina Region 5 BRFSS includes the counties of Alamance, Caswell, Chatham, Durham, Guilford, Orange, Person, Randolph and Rockingham.

Background and Project Description

In the summer of 2015, The Health Collaborative took 16 of its members on a site visit to Louisville, Kentucky to learn from the city's collaborative approach to addressing community health. During this visit, Collaborative members saw the valuable role of having a common data source that served as a foundation for decision making and a guide in aligning efforts. In bringing lessons learned back to the community, the decision to conduct a community health needs assessment was an easy one to make. The Health Collaborative understood that to move community health forward, it must first know the region's current health status. This included not only thinking about the differences between the city and county, but also the differences that exist within. The result was a community health needs assessment process that was collaboratively funded by Centra, Danville Regional Foundation and SOVAH Health Danville (Danville Regional Medical Center) and completed in partnership with The Health Collaborative and the Institute for Public Health Innovation. The findings from this project are located in two documents, this community health needs assessment report and the 2017 Health Equity Report.

Community Assessment Process

The community assessment process laid out by the Institute for Public Health Innovation included utilizing a collective impact framework and health equity lens, an in-depth community engagement process and the mapping of health outcomes to establish a baseline CHNA and health equity report.

Data Collection

Data was collected from two main source categories. The first was through secondary sources such as the Virginia Department of Health, North Carolina State Center for Health Statistics, United States Census Bureau, United States Department of Agriculture, Centers for Disease Control and Prevention. The community engagement process of the community health needs assessment and health equity report consisted of a community health survey for Danville and Pittsylvania County, key informant interviews and focus groups. The key informant interviews and focus groups took place throughout the Dan River Region including Caswell County, North Carolina. Each component of the engagement process built upon the step before it. Therefore, common themes and perceptions held among survey participants shaped some of the key informant interviews, which in turn impacted the development of the focus group questions.

Community Engagement Strategies by Location

	Community Health Survey	Key Informant Interviews	Focus Groups
Danville	●	●	●
Pittsylvania County	●	●	●
Caswell County		●	●

COLLECTIVE IMPACT

"Collective Impact is a framework to tackle deeply entrenched and complex social problems It is an innovative and structured approach to making collaboration work across government, business, philanthropy, non-profit organisations and citizens to achieve significant lasting social change."

Five Key Elements

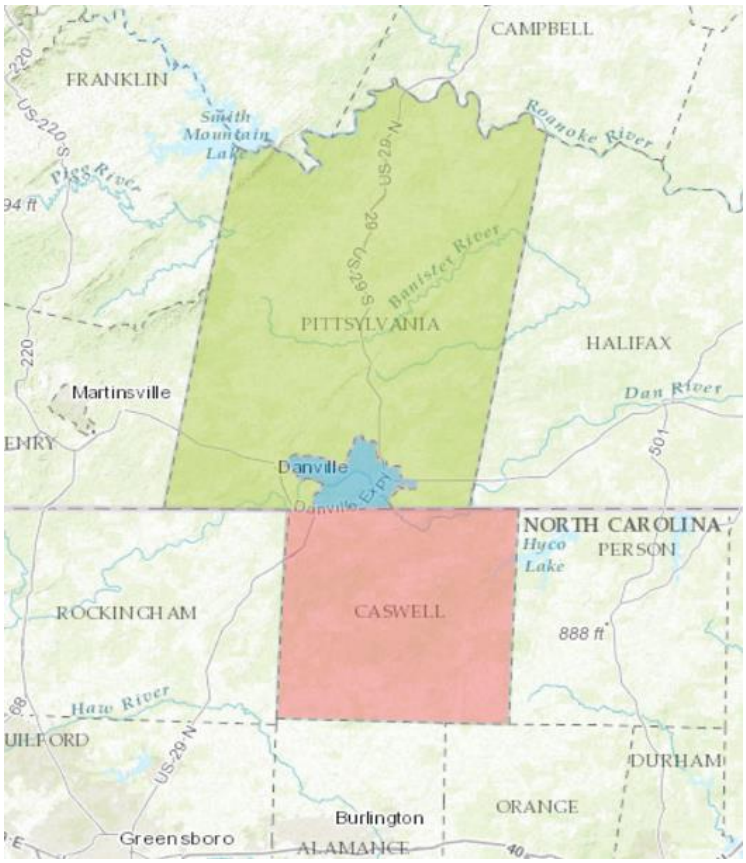
1. Common Agenda: Keep all parties moving toward the same goal
2. Common Progress Measures: shared measurement for alignment and accountability
3. Mutually Reinforcing Activities: the coordination of activities that leverage resources and areas of expertise
4. Continuous Communication: allows for a culture of communication by building trust, assuring mutual objectives and creating common motivation.
5. Backbone Organization: takes on the role of managing the collaborations by providing staff, and specific skills to serve the entire initiative and coordinate participating organizations and agencies.

Source: Collaboration for Impact
www.collaborationforimpact.com/collective-impact/

Furthermore, this process led to deliverables that were developed to be companion pieces to the Caswell County Community Health Assessment and the Virginia and North Carolina Behavioral Risk Factor Surveillance System. Results from the community engagement process are both woven throughout and presented in full at the end of the report. All perceptions, votes, rankings and incidence rates are reflective of community engagement participants.

Dan River Region Description

The Dan River Region is currently home to less than 130,000 people[xv]. Living in both urban and rural settings, residents have differing life experiences based on where they live and who they interact with on a regular basis. As two important pieces in determining quality of life, social relationships and living environment have a large impact on overall well-being[xvi]. To fully understand the health of the region, one must understand where one lives and who else lives there.



Map of the Dan River Region

The Place

Situated on the border of Virginia and North Carolina lies the Dan River Region. Made up of Pittsylvania County, Virginia; City of Danville, Virginia and Caswell County, North Carolina, the Dan River Region includes charming small towns, urban centers and historic downtowns, scenic river views and farmland. Yet, our region's greatest asset is our people, and a healthy population is key to our social, economic and physical vitality.

The People

Using the 2015 five-year estimates from the American Community Survey, the Dan River Region is home to approximately 128,418 residents, with 51.8% being female[xvii]. Furthermore, the Dan River Region is an older community with the average median age being 44.1 years[xviii] compared to the national median age of 37.6. The population table on the next page provides a further breakdown of the population.

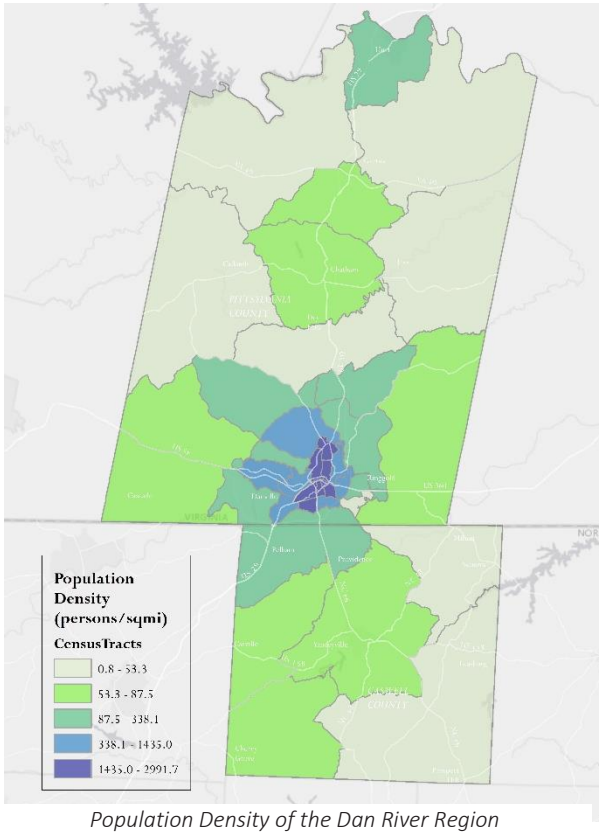
	Danville, VA[xix]	Pittsylvania County, VA[xx]	Caswell County, NC[xxi]
Total Population (2011-2015)	42,450	62,794	23,174
Total Female Population (2011-2015)	23,039 (54.3%)	31,988 (50.9%)	11,463 (49.5%)
Total Male Population (2011-2015)	19,411(45.7%)	30,806 (49.1%)	11,711 (50.5%)
Median Age (2011- 2015)	41.8	45.5	44.9
Median Female Age (2011-2015)	44.5	46.7	47.1
Median Male Age (2011-2015)	38.3	44.2	42.8

Density and Diversity

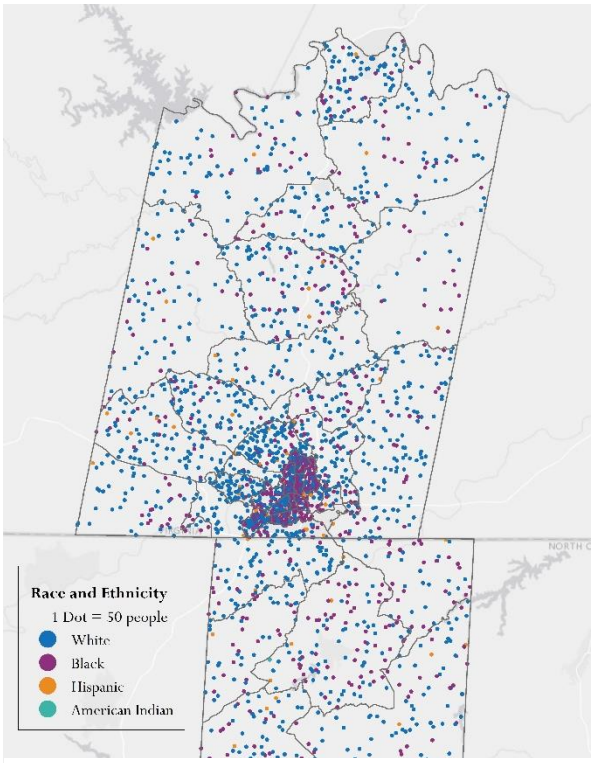
In taking a combined view of people and place, the next few pages cover the racial and ethnic diversity of the region, while also illustrating how people are distributed throughout. These patterns of where people live are an important component in understanding which areas of the region are more adversely impacted by socio-economic factors and health outcomes.

Density

By determining the number of people that live in a certain area, population density, or how close residents live to one another can be calculated. For the Dan River Region, the population density is calculated at 89.4 persons per square mile. The population density map to the right breaks the region into smaller communities and shows the population density for each census tract within the region. The City of Danville is the most densely populated area within the Dan River Region.



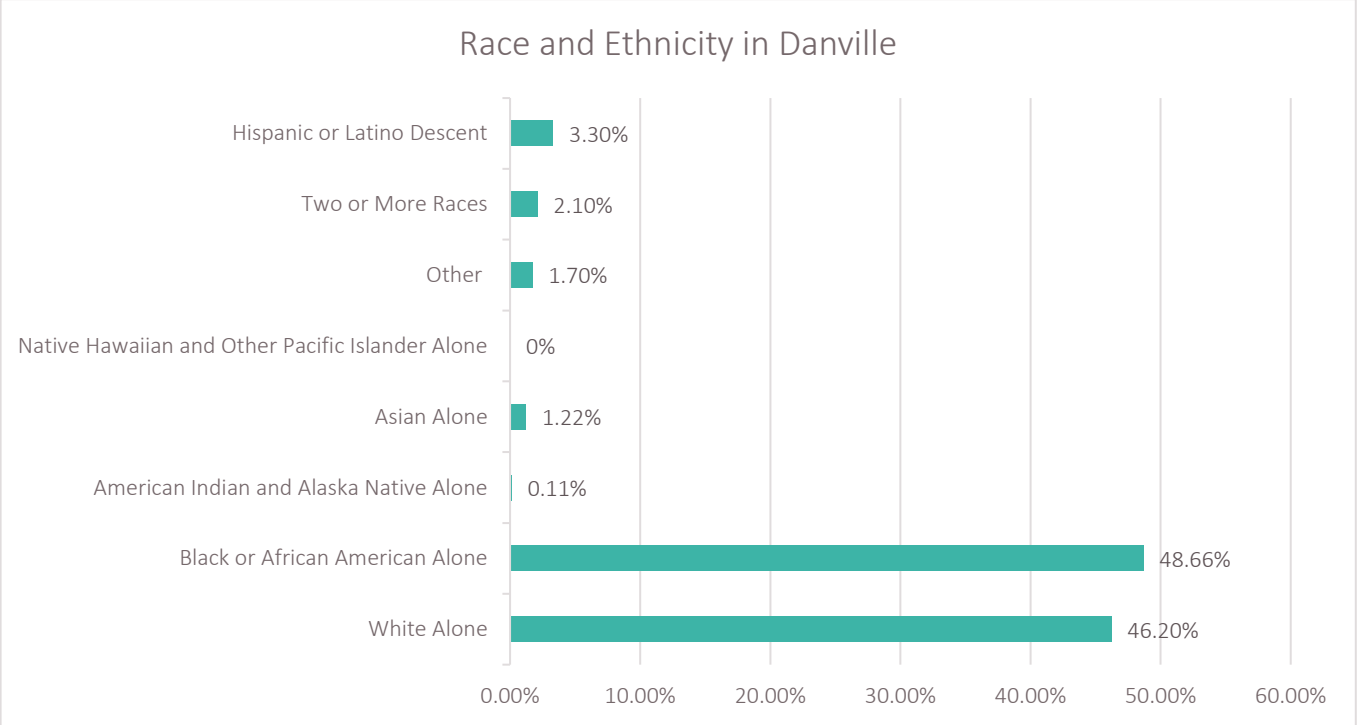
Population Density of the Dan River Region



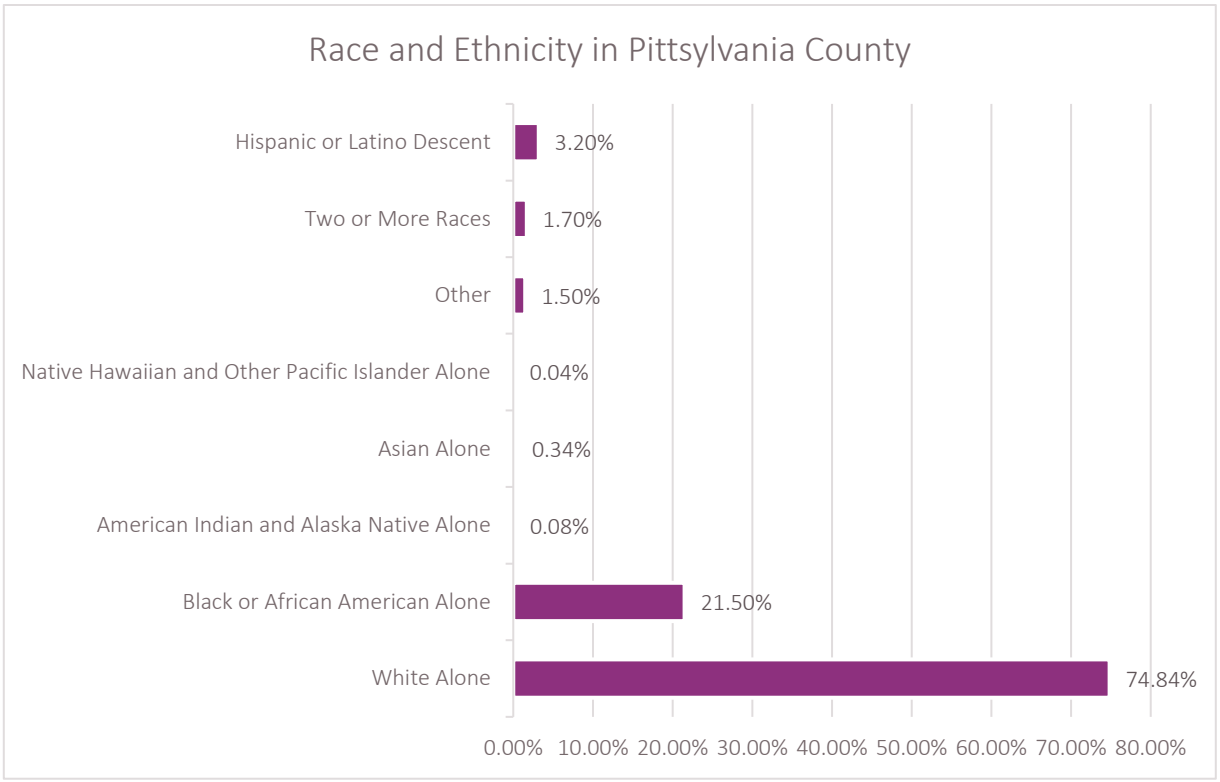
Map of Race and Diversity by Census Tract for the Dan River Region

Diversity

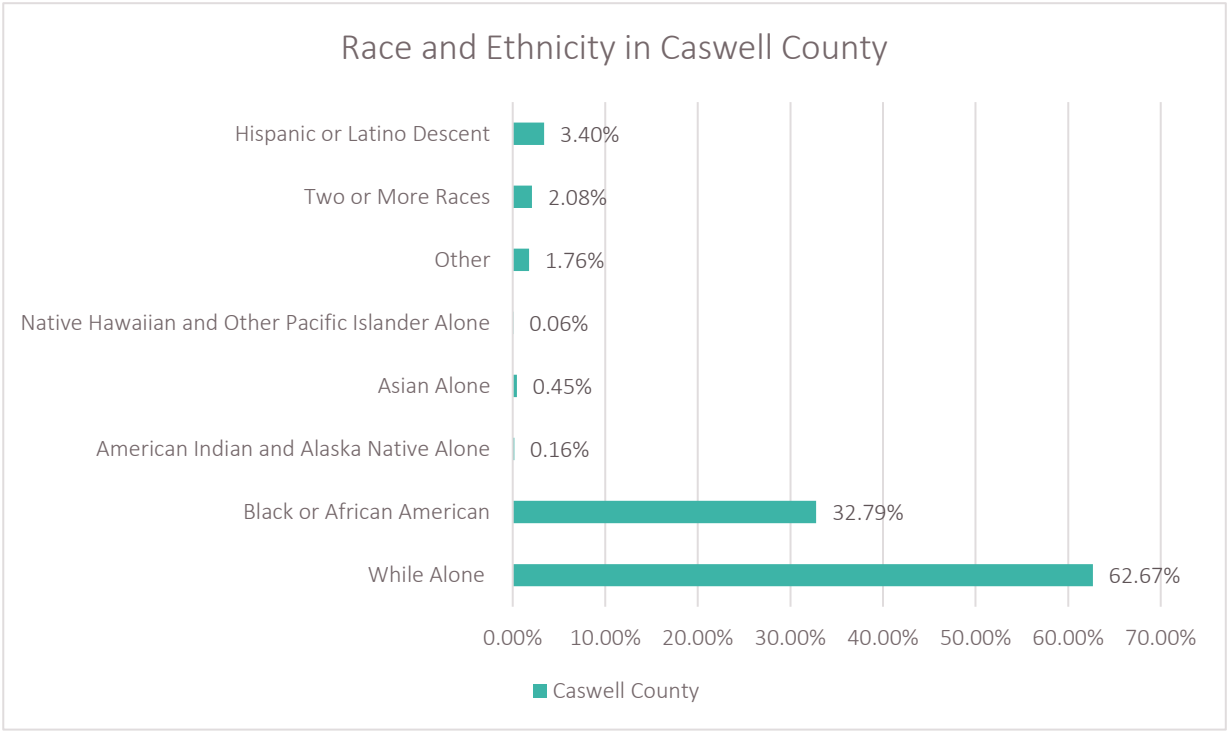
Race and ethnicity is one lens through which to view diversity. The map to the left show the breakdown of race and ethnicity for the Dan River Region by census tract. Each dot equals 50 people of the corresponding race or ethnicity (i.e., blue dot- white, purple down – Black or African American) in the census tract where the dot is located. While there is diversity present in each census tract, the distribution of diversity is not even across the region. For example, in the City of Danville, there is a shift in race and ethnicity as one looks west to east. The charts on the following two pages show the racial and ethnic breakdown of the City of Danville, Pittsylvania County and Caswell County.



Race and Ethnicity in Danville (2015 5 Yr. Estimates American Community Survey)



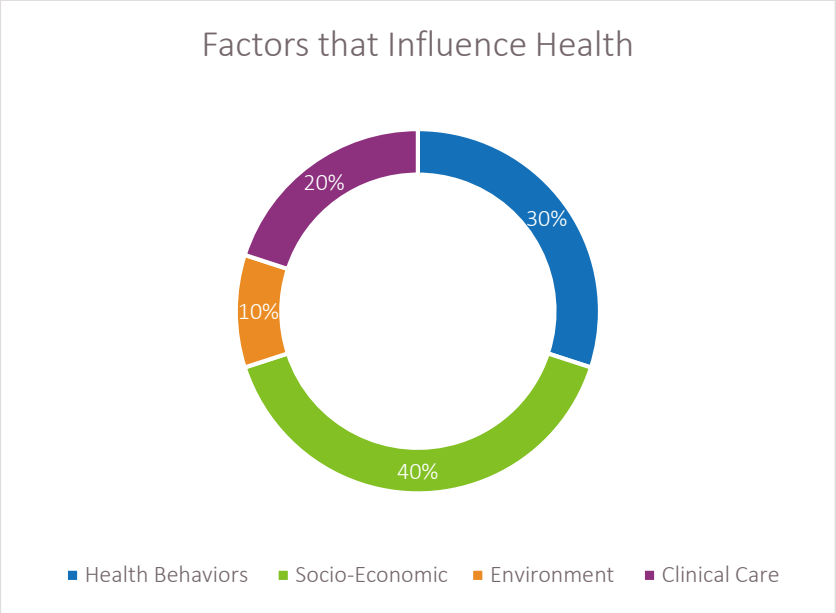
Race and Ethnicity in Pittsylvania (2015 5 Yr. Estimates American Community Survey)

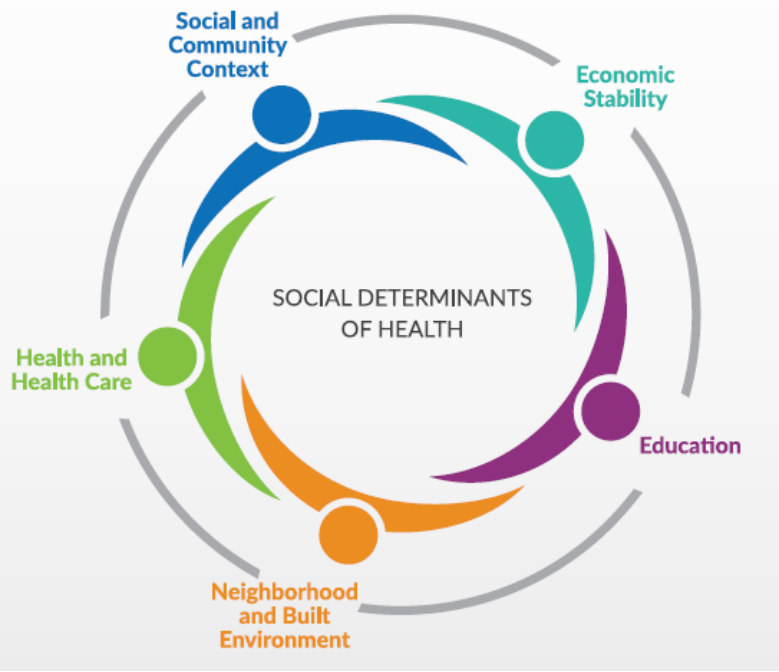


Race and Ethnicity in Caswell (2015 5 Yr. Estimates American Community Survey)

Factors that Influence Health

A health behavior is "an action taken by a person to maintain, attain, or regain good health and to prevent illness[xxii]." Health behaviors are an indication of one's health beliefs and a reflection of the environment in which they live. In looking at the factors that influence health, health behaviors account for an estimated 30% of total health impacts. Understanding the health behaviors of the region's residents provide a part of the context for one's understanding of health outcomes. Further context around health outcomes is provided by the social determinants of health.





Social Determinants of Health

"Social determinants of health are conditions in the environments in which people are born, live, work, play, worship, and age that affect a wide range of health functioning and quality-of-life outcomes and risks.[xxiii]" The five determinant areas are (1) economic stability, (2) education, (3) neighborhood and built environment, (4) health and healthcare and (5) social and community context. To learn more about the social determinants of health and their impact on the Dan River Region, explore the 2017 Health Equity Report.

Health and Wellness Data

The health and wellness data presented in this section establishes a baseline understanding of health outcomes for Danville and Pittsylvania County. Wherever possible, data was broken down into the into the City of Danville and Pittsylvania County. Data that could not be disaggregated is presented as the Pittsylvania-Danville Health District. For more information on the local health district visit http://www.vdh.virginia.gov/pittsylvania-danville/.

The data in this section does not include health and wellness information for Caswell County as they complete their own community health assessment on a three-year cycle. Instead this section is designed to be used as both a companion piece to both the 2015 Caswell County Community Health Assessment and the 2017 Health Equity Report.

Topics covered:

- Health Behaviors
- Cancer
- Chronic Diseases
- Communicable Diseases
- Sexually Transmitted Infections
- Maternal and Child Health
- Opioid Addition
- Violence and Injury
- Drinking Water and Lead

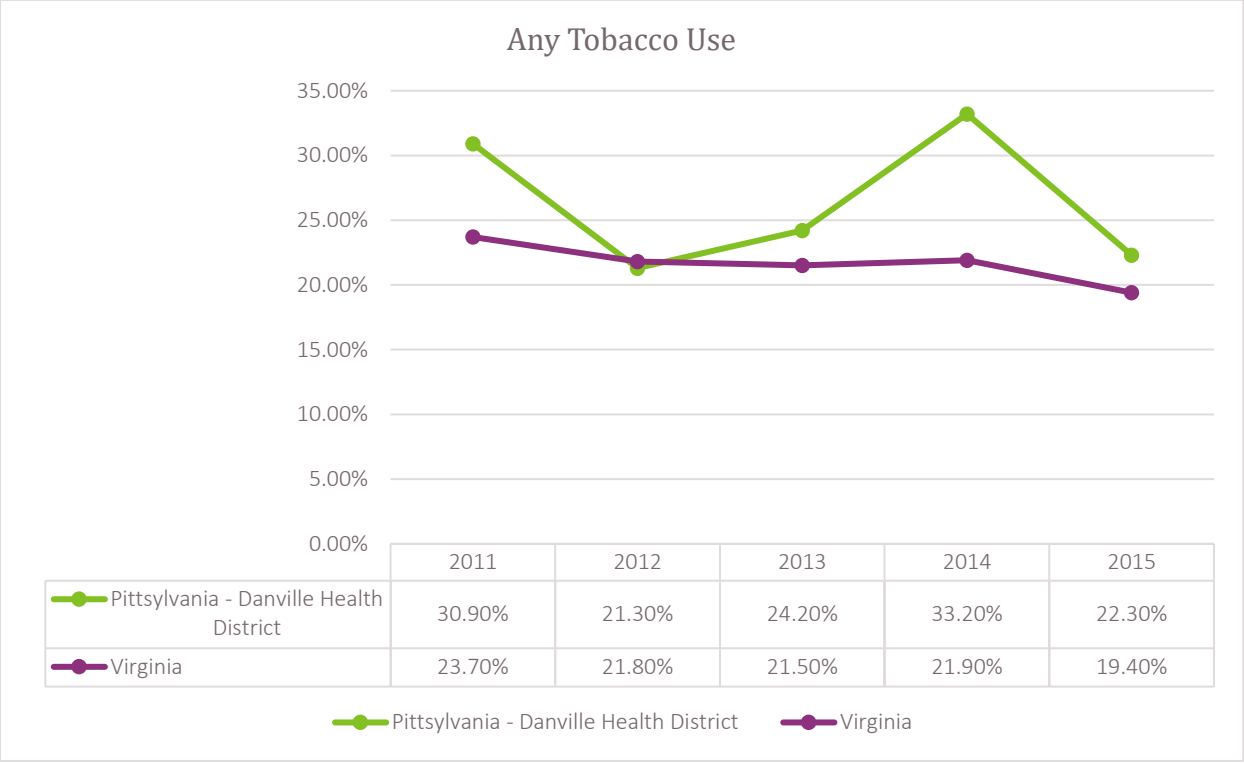
Tobacco Use

Per the Centers for Disease Control and Prevention, tobacco use "leads to disease and disability and harms nearly every organ of the body[xxiv]." Smoking has been linked to several cancers, and other chronic diseases such as heart disease, chronic obstructive pulmonary disease, diabetes, and rheumatoid arthritis. In addition to the damage smoking causes the smoker, it can also impact others who do not voluntarily participate in the behavior. "Secondhand smoke exposure contributes to approximately 41,000 deaths among nonsmoking adults and 400 deaths in infants each year[xxv]."

To collect data on tobacco use, the Virginia Department of Health includes a series of questions about the use of tobacco products on its Behavioral Risk Factor Surveillance Survey (BRFSS). Below are a few key indicators surrounding tobacco use for the Pittsylvania – Danville Health District.

Any Tobacco Use

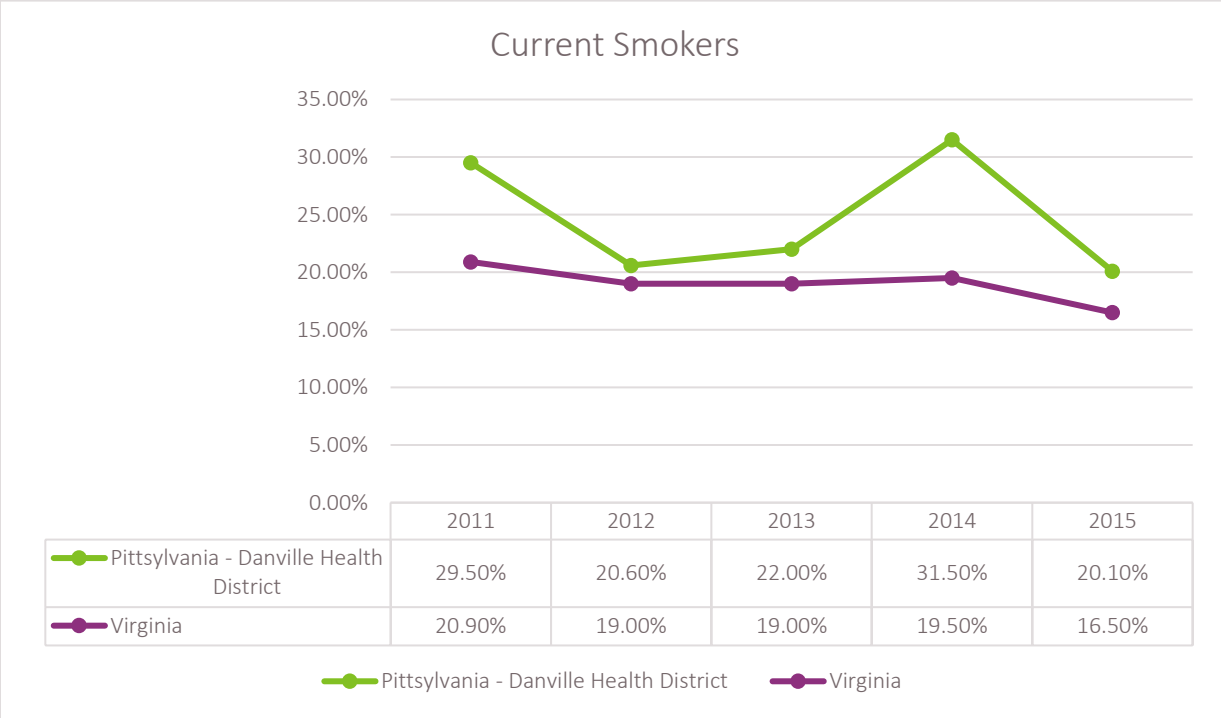
BRFSS Percentage of adults 18 years and older who have smoked 100 cigarettes in their lifetime and now smoke every day or some days or use chewing tobacco, snuff, or snus.[xxvi]



	2011	2012	2013	2014	2015
Pittsylvania - Danville Health District	30.90%	21.30%	24.20%	33.20%	22.30%
Virginia	23.70%	21.80%	21.50%	21.90%	19.40%

Current Smokers

BRFSS Percentage of adults 18 years and older who have smoked 100 cigarettes in their lifetime and now smoke every day or some days.[xxvii]



	2011	2012	2013	2014	2015
Pittsylvania - Danville Health District	29.50%	20.60%	22.00%	31.50%	20.10%
Virginia	20.90%	19.00%	19.00%	19.50%	16.50%

As seen in the two charts above, the percentage of adults 18 years and older who currently use tobacco and/or smoke cigarettes fluctuates from year to year. In 2012, a decrease is seen in current smokers as well as in overall tobacco use. 2012, was also the only year in which any of the data points for the Pittsylvania – Danville Health District dropped below the state percentage. This drop was seen in the any tobacco use chart when 21.30% of the BRFSS respondents in the Pittsylvania – Danville Health District answered yes to having smoked 100 cigarettes in their lifetime and now smoke every day or some days or use chewing tobacco, snuff, or snus compared to the state's percentage of 21.8.

On the Danville – Pittsylvania Community Health Survey, 385 participants answered a similar question about tobacco use. Among the survey participants 82.3% reported that they had not used tobacco in the last 12 months; 15.10% responded that they smoked cigarettes, while an additional 3.1% commented that the vape/ use e-cigarettes. In addition, 1.6% of survey respondents smoked cigars and/ or use a pipe. 1.6% of respondents also reported that they used smokeless tobacco (snuff, dip, chew, snus). As a follow-up, 394 survey participants, answered the following question, "which of the following best describes your tobacco use?". Among respondents, 63.5% have never used tobacco, 20.60% identify as past users who have quit, 11.90% use tobacco daily while 4.1% categorize their usage as occasional. Furthermore, in the Danville - Pittsylvania Community Health Survey, tobacco use received 64 votes as a factor that impacts family health, and 72 votes identifying it as a health issue impacting the community. Focus group participants completed a voting exercise, which mimicked the survey question on the top issues impacting community health. In this exercise, 9 votes were recorded for tobacco as an issue impacting community health.

Access to support services for Tobacco Cessation

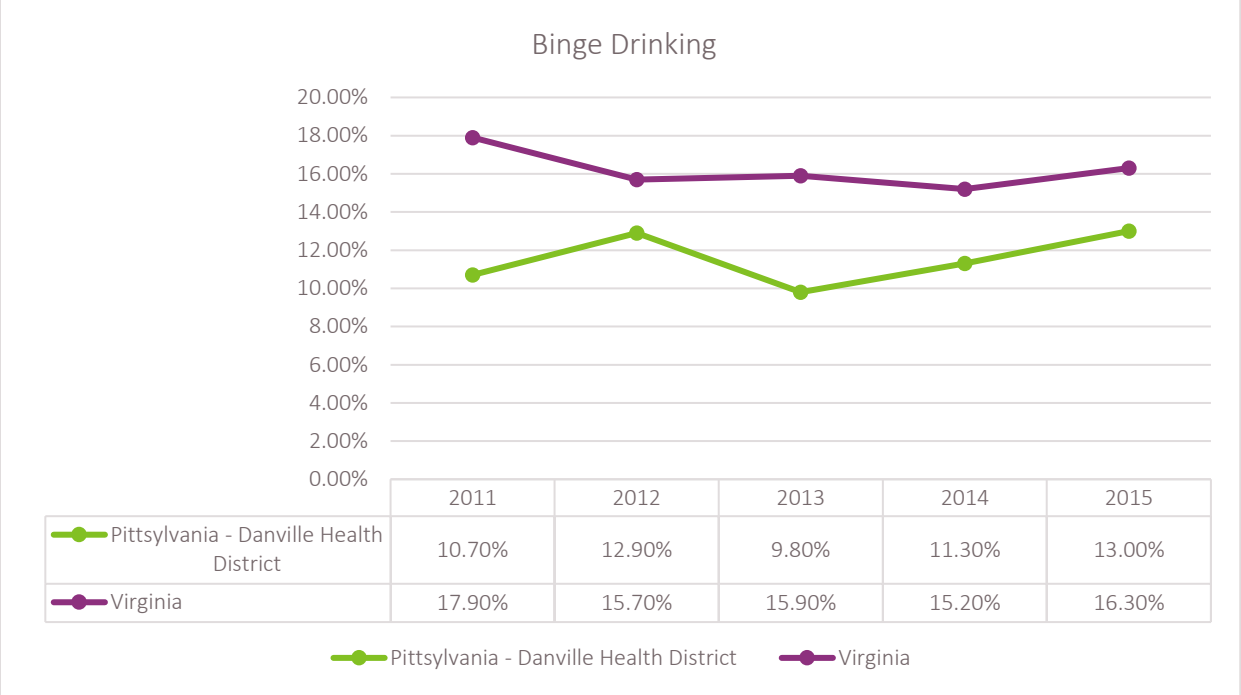
Transitioning to access to care, survey participants were asked how they felt about the accessibility of programs and services to help people quit smoking or other tobacco use. The question was answered by 390 participants; of which 19.7% indicated that they were not satisfied; 19.5% indicated that they were somewhat satisfied, with 53.8% reported that they were unsure.

Alcohol Consumption and Binge Drinking

Per the Centers for Disease Control and Prevention, "binge drinking is the most common, costly, and deadly pattern of excessive alcohol use in the United States.[xxviii]" Furthermore, it was estimated in 2010 that excessive drinking cost the United Sates $249 billion. Decreased workplace productivity, medical and court costs were the major contributors to this expense. Of that $249 billion, $191 billion came from costs associated with binge drinking[xxix].

Binge Drinking

BRFSS: Percentage of adults 18 years and older who had 5 or more drinks for males or 4 or more drinks for females on an occasion in past 30 days[xxx].



Heavy Alcohol Consumption

BRFSS: Heavy Alcohol Consumption (Adult men having more than 2 drinks and adult women having more than one drink per day).[xxxi]

3 Year Rate (2012-2013-2014) of Heavy Alcohol Consumption	
Pittsylvania – Danville Health District	3.8%
Virginia	5.4%

For both alcohol consumption indicators, the Pittsylvania – Danville Health District is below state levels. However, the binge drinking chart shows an increase in percentages over the past two years for the Pittsylvania – Danville Health District.

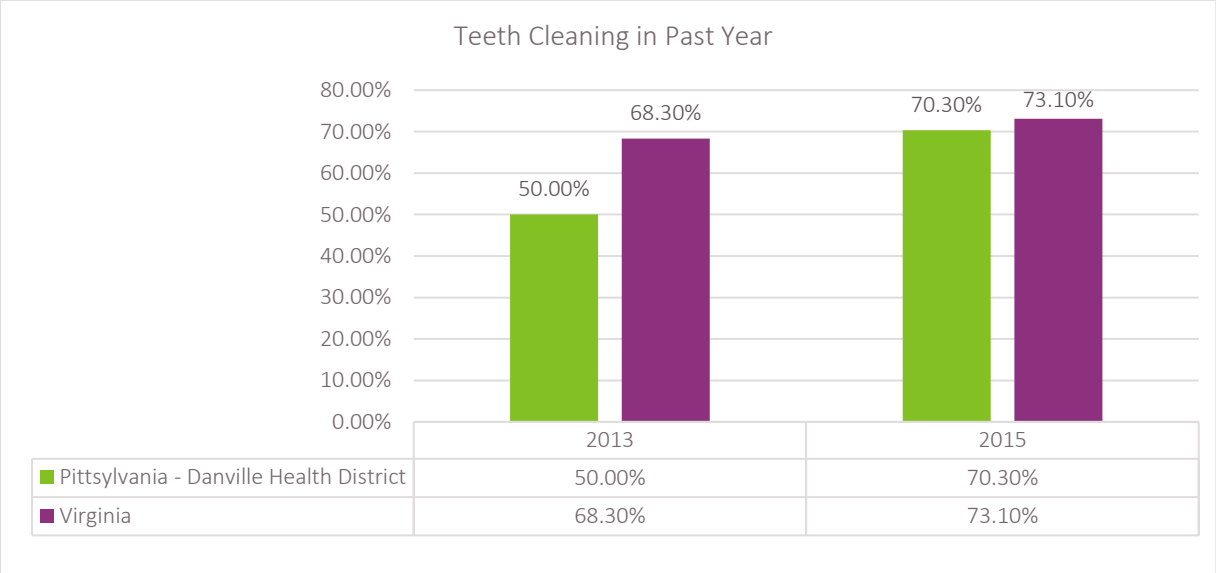
As part of the Danville – Pittsylvania County Community Health Survey, respondents (question answered by 396) were asked about their drinking habits. When answering the following question, "on days when you drink alcohol, about how many drinks do you consume on average?" 22.7% responded that they consume 2-3 drinks; 2% of respondents reported that they drink 4-5 drinks, while 1% of respondents noted that they consume 6 or more drinks on average. In addition, 40 survey respondents voted for substance abuse (including alcohol) as a family health issue. Substance abuse (including alcohol) also received 194 votes from survey respondents as a community health issue. Furthermore, when asked to vote on community health issues, focus group participants selected substance abuse (including alcohol) 11 times. Going a step farther, survey participants were asked how satisfied they were with the level of access to alcohol and drug treatment services or both adults and youth. Of the 393 survey participants who answered, 29.5% were not satisfied with alcohol and drug treatment options for adults; 15.8% were somewhat satisfied and 50.4% of respondents selected "don't know". When answering the same question for access to treatment services for youth, 390 survey participants responded. Of those who did, 32.8% indicated that they were not satisfied, while 52.8% were unsure.

Oral Health

Oral health is an important component of good overall health. There is a growing body of research that continues to connect oral health with chronic diseases such as heart disease and diabetes. Poor oral health has large economic impacts as well. It is estimated that the United States spends on average $113 billion a year on costs related to dental care. In addition, the reduced workforce productivity due to time receiving dental care amounts to more than $6 billion each year[xxxii]. To address oral health, it was selected as a leading health indication for the nation as part of the Healthy People 2020 initiative which is working to increase the proportion of children, adolescents, and adults who visited the dentist in the past year[xxxiii].

Dental Cleaning

BRFSS: Percentage of adults 18 years and older who had their teeth cleaned by a dentist or dental hygienist within the past year.[xxxiv]



The BRFSS included dental cleaning questions on its 2013 and 2015 questionnaire. Looking between these two-year data sets, the Pittsylvania – Danville Health District has a lower percentage of adults who

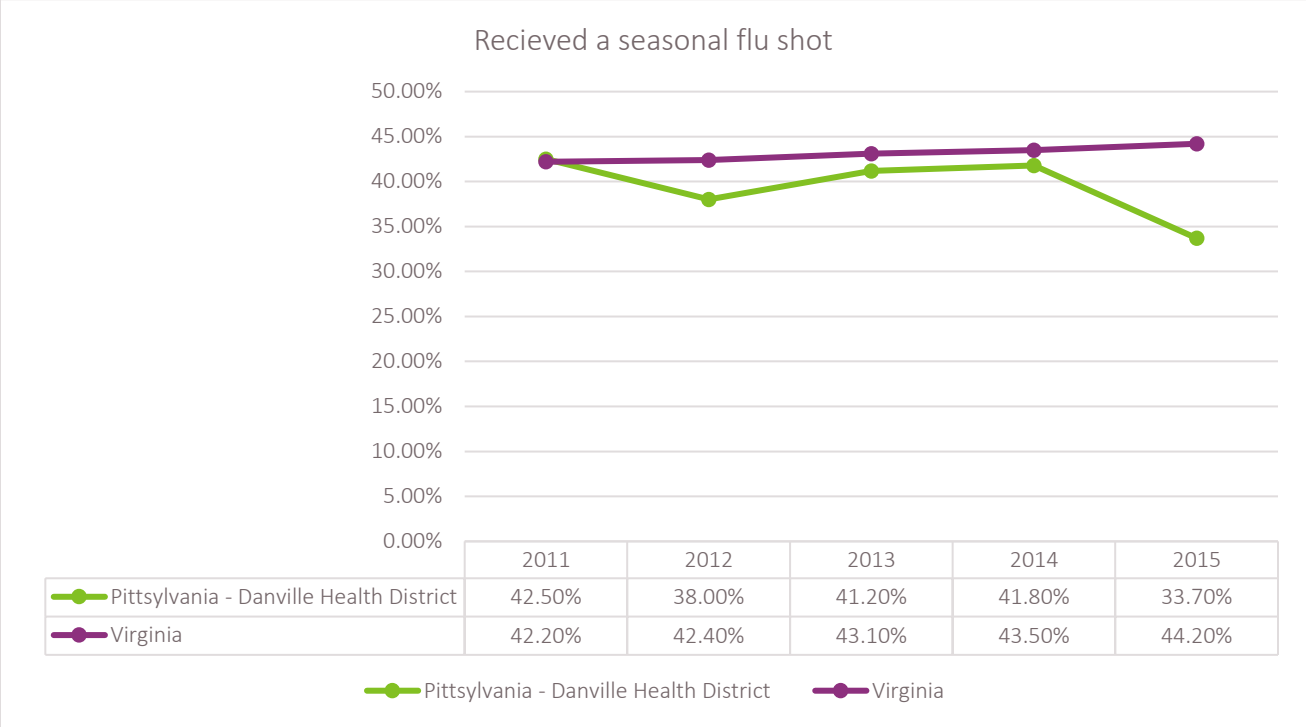
had their teeth cleaned in the last year compared to the state. However, there was improvement seen in the Pittsylvania – Danville Health District between 2013 and 2015 and the percentage rose from 50% to 70.3% of adults having their teeth cleaned within the past year. A similar question about routine dental care was asked on the Danville – Pittsylvania community health survey. Answered by 398 participants, 71.1% of respondents indicated that they had seen a dentist for routine dental care in the past year. In addition, dental and oral health received 106 votes as an issue impact family health and 54 votes as an issue impacting community health. Throughout the community engagement process, perception of accessibility of dental services were also discussed. On the Danville – Pittsylvania County Community Health Survey, respondents were asked to select their level of satisfaction with the accessibility of dental services for adults and youth. When focusing on adults, of the 390 respondents, 16.2% were not satisfied, 39% were somewhat satisfied, and 34.4% were very satisfied. When it came to satisfaction about the accessibility of dental services for youth, 393 participants answered. 10.7% of respondents said that they were not satisfied, while 34.6% were somewhat satisfied and 29.3% were very satisfied. Survey participants were also given to opportunity to select which medical specialties were most needed in the Danville – Pittsylvania area, of the 365 participants that answered this question, dentist was selected 69 times. In addition, one participant used the other field to input low cost dental services. Of those 70 votes for increased dental care providers, 26 were Pittsylvania County residents and the remaining 44 were residents of Danville.

Influenza

Influenza, more commonly referred to as the Flu is a communicable disease, that impacts millions of people every year. Due to its ability to spread through communities, "the single best way to protect against the flu is to get vaccinated each year.[xxxv]" The flu vaccine is also a preventative measure for residents that have chronic health conditions such as diabetes, asthma, and heart disease.

Flu Shot

BRFSS: Percentage of adults 18 years and older who had a seasonal flu vaccine in the past year.[xxxvi]



These five years of data comparison between the Pittsylvania – Danville Health District and Virginia, highlight the differences in participation in receiving seasonal flu shots. In the state's data, there is a consistent increase in the percentage of adults receiving flu shots. This is not the same for the Pittsylvania – Danville Health District, which has seen both increases and declines in participation. The 2015 percentage however, was the lowest participate rate in the past five years. For further comparison, the chart below looks the seasonal flu short participation rates with neighboring health districts, which all saw a decline in participation from 2014 to 2015.

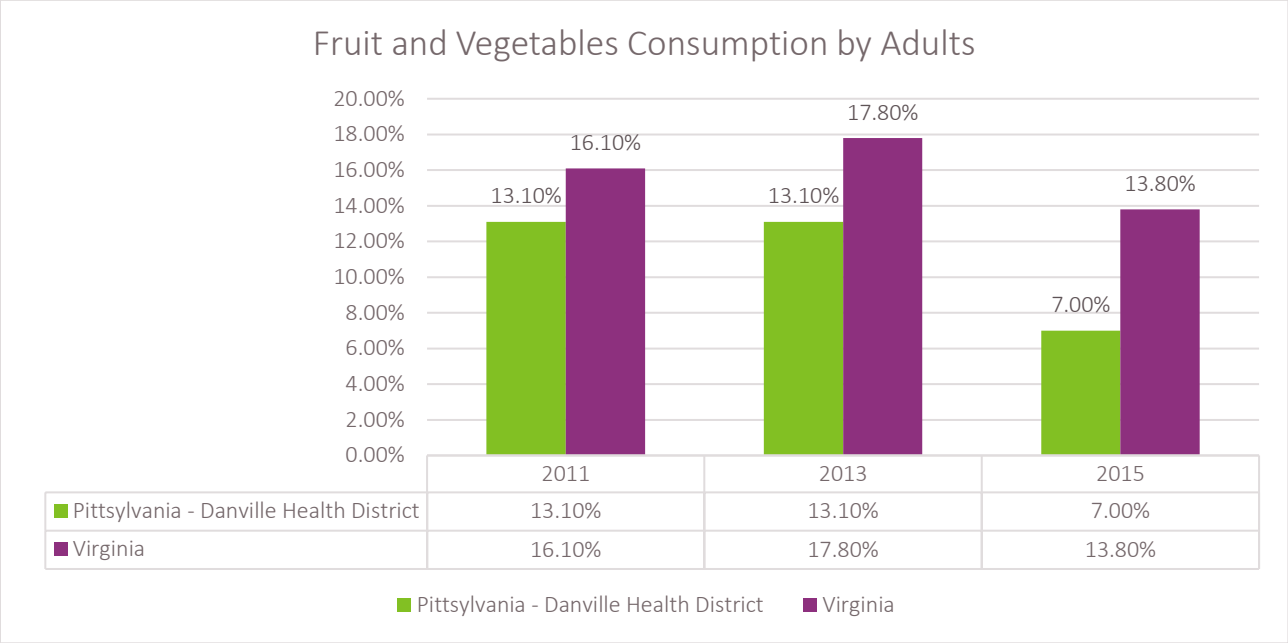
Flu Shot Comparison	2014	2015
Pittsylvania- Danville Health District	41.80%	33.70%
West Piedmont Health District	41.5%	32.6%
Central Virginia Health District	44.3%	41.1%

Healthy Eating

Fruit and vegetable consumption is an important component of healthy eating. Eating fruits and vegetables provides the human body with important nutrients that can help lower the risk of chronic diseases and help maintain a healthy weight[xxxvii]. The recommended number of servings varies based on age, sex, and physical activity level. On average, the number of combined fruit and vegetables servings fall between 5 and 7 when based on U.S. government guidelines.

Fruit and Vegetable Consumption

BRFSS: Percentage of adults 18 years and older who consume 5+ fruits and vegetables a day.[xxxviii]



In the chart above, it becomes apparent that most residents in the Pittsylvania – Danville Health District and the state of Virginia do not consume the recommended number of fruits and vegetables per day. To determine how many servings of fruits and vegetables, residents are consuming, the mean consumption rates were found and are presented in the tables below for the years 2011 and 2013 (the two most recent years this statistic is available for).

Average number of Servings of Fruit Per day	2011[xxxix]	2013[xl]
Pittsylvania – Danville Health District	1.17	1.1
Virginia	1.41	1.4

Average number of Servings of Vegetables Per day	2011[xli]	2013[xlii]
Pittsylvania – Danville Health District	1.66	1.1
Virginia	1.86	1.4

To better understand current fruit and vegetable consumption rates, the Danville – Pittsylvania Community Health Survey asked about daily fruit and vegetable consumption. The question, "on average, how many servings of fruit do you eat each day?", was answered by 395 respondents. Of those who answered, 67.1% selected 1-2 servings, 16.7% selected 0 servings, 14.7% reported consuming 3-4 servings while 1.5% reported that they consumed 5 servings or more. The same question asked about vegetable consumption levels was answered by 397 respondents. Of those who responded, 66% reported that they consumed 1-2 servings daily, 24.4% selected 3-4 servings, 6% indicated that on average they consume no vegetables, while 3.5% responded that they consumed 5 or more servings per day.

The broader topic of healthy eating was discussed during multiple points in the community engagement process. In addition to fruit and vegetable consumption questions, survey participants answered the following two questions about the location of food retail options. The first question, "the location of food outlets (grocery stores, corner stores, convenient stores, community gardens and farmers' markets) make it _____ to make healthy choices", was answered by 391 participants. To fill in the blank, 63.7% of respondents said that the location of food outlets made it *easier* to healthy choices. 24.8% of respondents said that food retail locations made it *harder* to make healthy choices, while 11.5% were *unsure* how the location of food outlets impacts their ability to make healthy choices. The second fill in the blank question focused on the location of fast food restaurants. The question, "the location of fast food restaurants make it _____ to make healthy choices was answered by 395 respondents. Of those, 61.8% said that the location of fast food restaurants made it *harder* to make healthy choices, whereas 24.1% responded that their location made it *easier* to make healthy choices. In addition to the survey questions, focus group participants also discussed healthy eating. When asked to define healthy eating, respondents replied with a variety of answers, include eating fruit and vegetables, watching salt and sugar consumption, portion control, making home cooked meals and not relying on processed pre-packaged meals and following nutrition guidelines. When asked about barriers to healthy eating, the following common themes emerged:

- Location of grocery stores
- Cost
- Lack of transportation
- Food insecurity
- Lack of understanding around nutrition
- Food pantry – does not always have vegetables / some I don't know how to cook

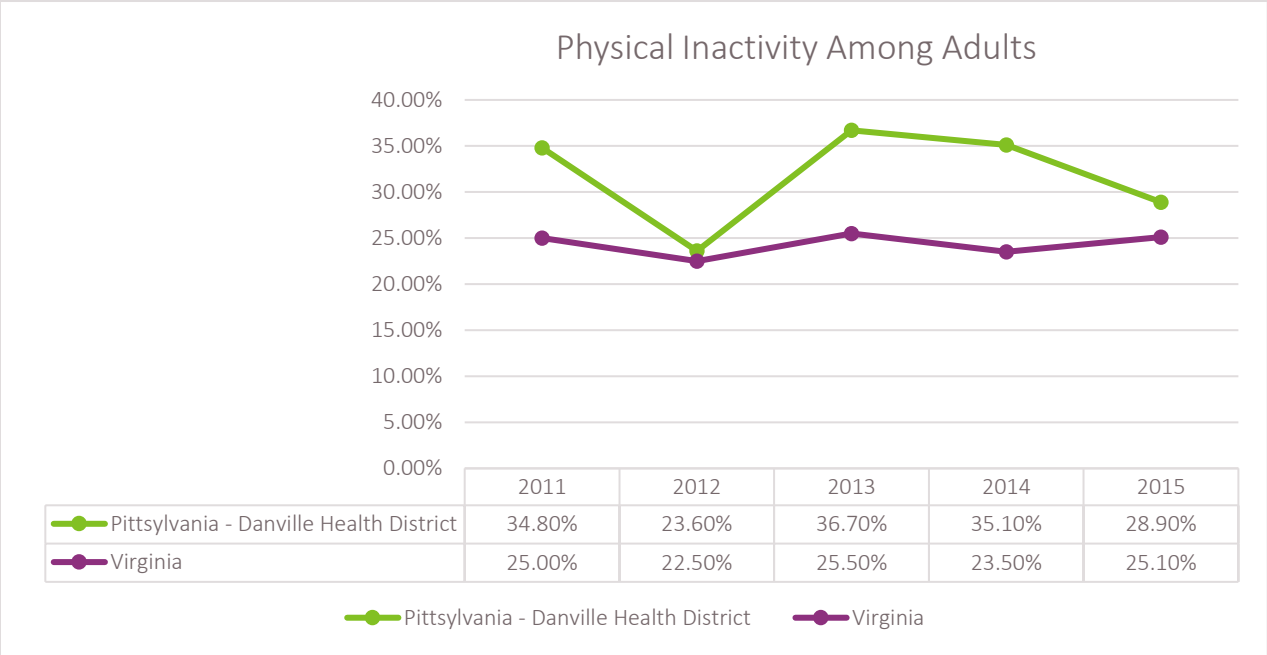
In many of the key informant interviews conducted throughout the region, food and food access were named as factors affecting health. Within these conversations, the recurring themes of food deserts, food insecurity and the southern influence on diets were captured.

Active Living

Regular physical activity is one of the most important things one can do for one's health. Having an active lifestyle can help lower the risk of chronic diseases, such as heart disease and diabetes. In addition, it can help with weight control, strengthen bones and muscles, while improving mental health[xliii].

Physical Activity

BRFSS: Percent of adults 18 years of age and older that did not participate in any physical activities or exercises in the past month.[xliv]



The graph above, shows the percentage of adults that did not participate in any physical activity in the month before responding to the BRFSS survey. For all five years, the Pittsylvania – Danville Health District had higher percentages of physically inactive adults than the state. However, the percentage of inactive adults has been on the decline since 2013.

To provide further context around the health district's physical activity level, the chart to the right shows the percentage of adults who participated in 150 minutes or more of aerobic physical activity per week, for the years 2011 and 2013.

% of adults who participated in 150 min aerobic exercise per week	2011[xlv]	2013[xlvi]
Pittsylvania – Danville Health District	46.2%	45.2%
Virginia	52.4%	51.2%

On the Danville – Pittsylvania Community Health Survey, respondents were asked "how many days do you exercise for 30 minutes on more in a typical week?". Of the 397 respondents, 33% reported 1-2 days, 31% reported none, 24.9% selected 3-4 days while 11.1% indicated that they typically exercise for 30 minutes or more 5-7 days per week. To better understand access to physical activity opportunities, the survey included the following fill in the blank question: "The location of parks, playgrounds, open spaces, gyms and recreational facilities makes it _____ to make healthy choices". Of the 396

respondents, 54.4% stated that the location of physical activity opportunities made it *easier* to make healthy choices, 35.1% selected that the location made it *harder* to make healthy choices, while 10.4% were *unsure* how the location of physical activity opportunities impacts their ability to make healthy choices.

Physical activity was also addressed during the focus groups. One of the initial framing questions focused on defining what it meant to be physical active. Several recurring themes were noted during the five sessions. These included:

- Exercise 3-5 times per week
- Moving everyday
- Walking on the trail
- Making sure to raise the heart rate
- Participating on sports teams and/ or in group classes

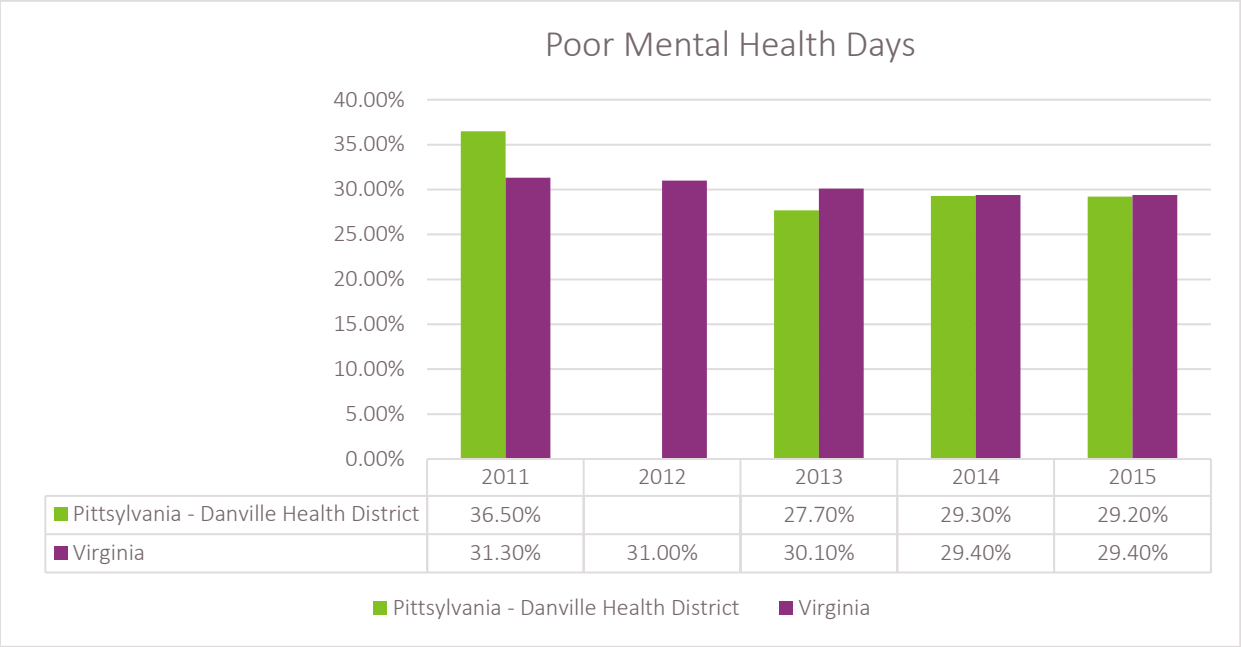
When discussing barriers to physical activity with focus group participants, there were several challenges that emerged in multiple conversations. The location of parks in the region's more rural communities was highlighted frequently. In the City, the location of parks and play spaces, was discussed in terms of a lack of transportation and the fear of / perception of crime and how these concepts impacted accessibility and usage. Those who are within walking distance of a neighborhood park, also cited the challenges of no sidewalks, heavy traffic and young children as factors negating their ability to walk. The concept of time and how shift work is structured was also labeled as a barrier to physical activity. The cost of gym memberships, rec leagues and other opportunities was also a shared challenge, as these opportunities are the first to be cut from family budgets when money becomes tight.

Mental Health

"Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.[xlvii]" To measure and monitor mental health, research points to a number of indicators that can be grouped into three main categories: emotional well-being, psychological well-being and social well-being.

Poor Mental Health Days

BRFSS: Percentage of adults 18 years and older who reported one or more days of poor mental health in the past 30 days.[xlviii]



	2011	2012	2013	2014	2015
Pittsylvania - Danville Health District	36.50%		27.70%	29.30%	29.20%
Virginia	31.30%	31.00%	30.10%	29.40%	29.40%

As depicted in the chart above, the percentage of adults reporting one or more days of poor mental health has had slight fluctuations in the 2011-2015 timeframe. Since 2013, the Pittsylvania – Danville Health District percentage has hovered in the high 20s. In relation to the state's percentages, those belonging to the Pittsylvania – Danville Health District have been both higher and lower. Since 2014, the health district's percentages have been ever so slightly lower than the state's rate.

On the Danville – Pittsylvania Community Health Survey, respondents were asked. "how many days in the past month were you not able to work, or do daily activities because of poor mental health?". Of 390 responses, 87.2% reported that they missed 0 days, 5.9% 1-2 days, 2.3% 3-4 days, 1.3% 5-6 days, 2.1% 7-10 days, and 1.3% 11 or more days. In addition, 4.8% of survey respondents said that they have been told by a health care professional that they had a mental illness (questioned answered by 396). In that same question, 23.5% of respondents indicated that they have been diagnosed with depression or anxiety. Mental health was also an answer choice for the questions dealing with family and community health. When choosing the 5 health issues impacting family health (question answered by 378) mental health received 124 votes. In addition, mental health received 174 votes when selecting the top issues impacting community health (393 participants answered). This same voting of top community health issues, was completed in the focus groups (57 total participants). As a combined total, mental health received 23 votes, making it the fifth highest community health issue among focus group participants.

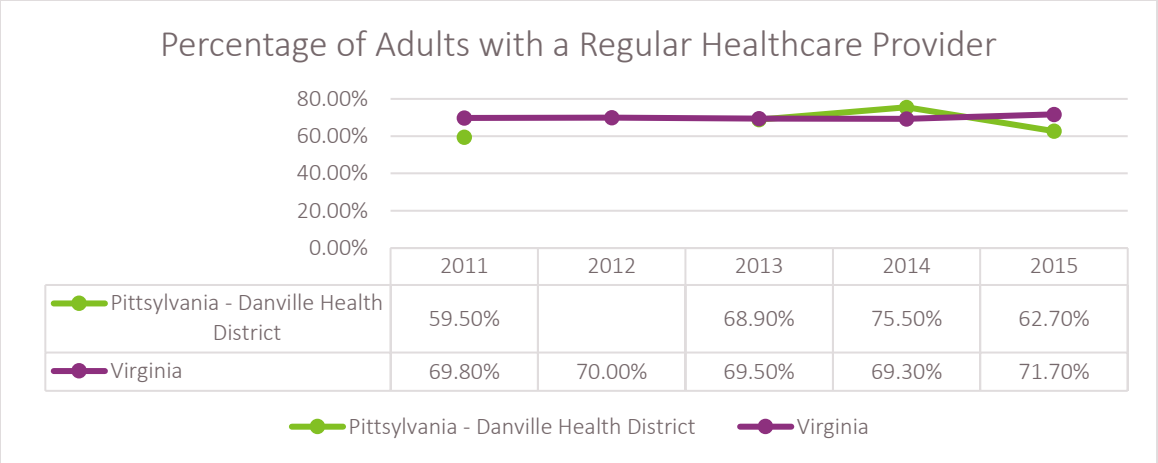
On the Danville – Pittsylvania Community Health Survey, a series of questions on the accessibility of mental health services were asked. For example, "how do you feel about the accessibility of mental health services in the area?" was answered by 395 participants. Of those who answered, 30.4% were not satisfied, 29.4% were only somewhat satisfied, 4.3% were very satisfied and 35.9% stated that they did not know. In addition, the same question was asked, but this time geared specifically towards those 65 and older – "how do you feel about the accessibility of mental health services for seniors (65+). Of the 392 participants that answered, 25.3% were not satisfied, 19.1% were somewhat satisfied, and 4.6% were very satisfied. In addition, 51% responded that they did not know. The accessibility issue was further addressed through the following question; "Which medical specialties are most needed in Danville or Pittsylvania County?". 365 survey participants voted for several specialties. Mental health received 139 votes making it the most requested medical specialty among survey participants. In addition, five survey respondents used the other field to input counselors/ counseling services.

Healthcare Access and Coverage

Access to healthcare goes beyond the cost of care to include the physical location of providers. Per Virginia's Plan for Well-being, "the leading category of healthcare spending in Virginia is hospitalization. Many hospital stays can be avoided through prevention and primary care.[xlix]" Primary Care Providers bring several health management services to one home, building a detailed health history that allows for providers to determine trends and make more informed treatment decisions. Furthermore, those who establish relationships with a Primary Care Provider, are better able to manage their health and have lower health care costs.

Primary Care Provider Relationships

BRFSS: Percentage of adults 18 years and older who have at least one personal doctor or health care provider.[l]



For the Pittsylvania – Danville Health District, the graph above shows a series of fluctuations that make it impossible to determine a steady trend. The percentage of adults with a primary care provider has increased since its lowest level of 59.50% in 2011. However, data was not collected in 2012, and 2013-2015 has seen a series of declines and increases. In 2014, the Health District's percentage surpassed the state's only to fall well below the state's percentage the next year.

Patients to Physician or Other Provider Ratios	Primary Care Physician	Other Primary Care Providers
Danville[li]	1,040: 1	584:1
Pittsylvania[lii]	20,790 :1	6,219 :1

Access to healthcare was a topic that was covered extensively in the community engagement process. When asked, "do you have a person(s) who you think of as your personal doctor, or healthcare provider?", 394 participants responded in the following ways:

- 41.6% Yes, only one
- 36% Yes, more than one
- 21.8% No
- 0.5% Don't know

In addition, survey participants were also asked, to fill in the blank for the following, "the location of healthcare services make it _____ to make healthy choices". 394 Danville – Pittsylvania Community Health Survey participants completed the above sentence, in the following ways:

- 55.8% easier
- 26.10% harder
- 18% unsure

Broadening access from just location to think about access as a whole survey participants were then asked "how do you feel about the accessibility of healthcare or medical services in the area?". 395 community health survey participants responded to this question. Among respondents, 19.2% were not satisfied, 55.7% were somewhat satisfied, 18% were very satisfied and 7.10% responded that they did not know. As Danville and Pittsylvania County have an aging population, the same question around broader access to asked with a focus towards those who are 65 years or older – "How do you feel about the accessibility of health care or medical services for seniors (65+)?". Among the 391 respondents, 19.4% were not satisfied, 33% were somewhat satisfied, 9% were very satisfied and 38.6% selected don't know.

In thinking more specifically about cost of care, community health survey participants were asked "How do you pay for healthcare (check all that apply)?", which was answered by 397 participants. Among the respondents 1.8% reported Veterans' Administration, 7.6% reported using Medicaid, 20.7% reported Medicare, 73.6% reported paying with health insurance, while 33% also stated that they paid in cash.

When asked to identify other challenges to receiving healthcare – "Which of these issues have made it difficult for you to get the health care you need (check all that apply)?", among the 386 individuals who responded:

- 44.3% - Not applicable
- 34.5% - Cost of care
- 19.7% - Insurance problems/ lack of coverage

- 16.3% - Long waits for appointments
- 10.6% - Lack of evening and weekend services
- 6.5% - Unfriendliness of provider or office staff
- 6% - Afraid to have health check-up
- 5.7% - No available provider near me
- 4.9% - No regular source of healthcare
- 3.9% - Lack of transportation
- 3.9% - Do not know what type of services are available
- 2.6% - Other forms of discrimination
- 1.3% - Discrimination based on gender
- 0.5% - Discrimination based on sexuality
- 0.3% - Discrimination based on race

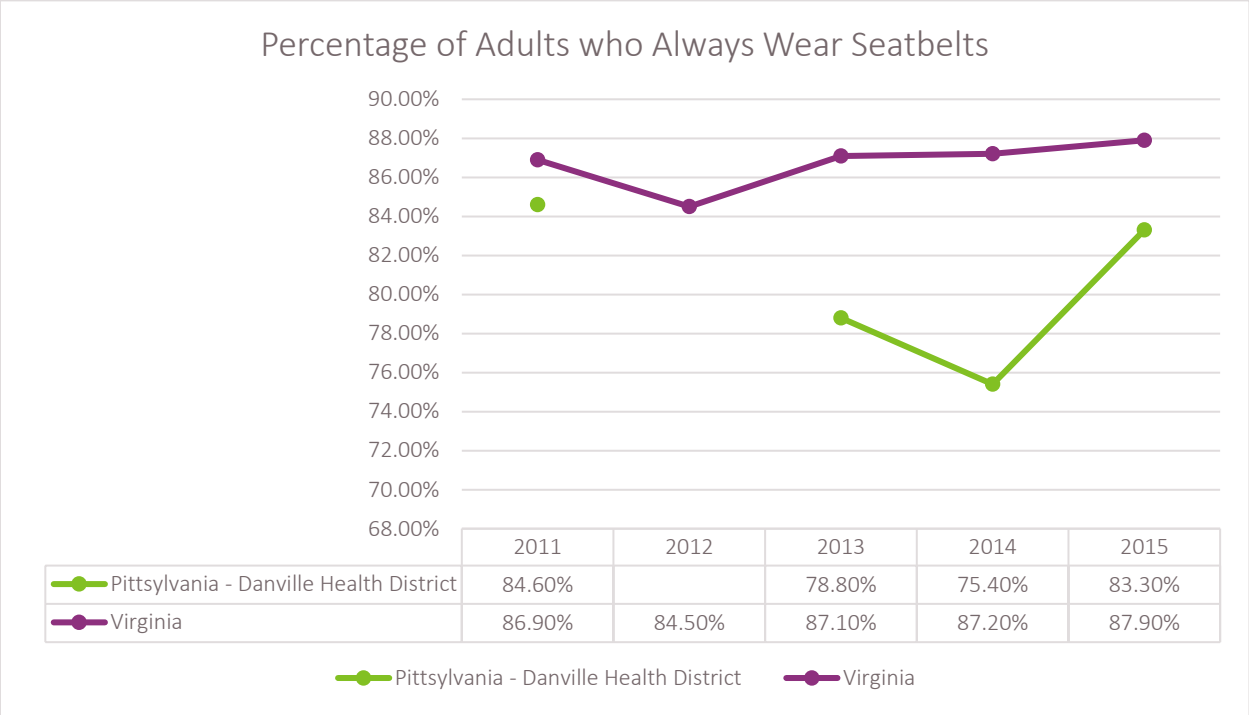
An “other” choice was given to provide the survey respondents with the ability to input their own answers. Other responses included, provider offices not retuning calls, cost of transportation (gas money), getting time off from work, and the location / length of travel time.

Key informant interviews also touched on access to care. The major themes centered on transportation, cost, long wait times for appointments, and the challenges associated with recruiting healthcare professionals to the area. From the provider perspective, key informants also added capacity as a challenge for providers in taking on more patients and reducing wait times. The focus groups also discussed access to care. Participants highlighted the cost of care and the impact of poverty, transportation limitations and taking the extended time off work (includes travel time and wait time) as barriers to accessing care.

Seatbelt Use

In 2015, the leading cause of death for those ages 1-54 in the United States were motor vehicle crashes. That same year, 2.5 million drivers and passengers visited emergency departments with injuries caused by motor vehicle crashes. Furthermore in 2010, it was calculated that non-fatal crash injuries totaled more than $48 billion in combined medical costs and time missed/ decreased productivity at work.[liii]

BRFSS: Percentage of adults 18 years and older who always wear seatbelts when driving or riding in the car.[liv]



In the 2011 – 2015 timeframe, 2011 saw the highest percentage (84.6%) of Pittsylvania – Danville Health District residents reporting that they always wear a seatbelt when in a car. That percentage declined in 2013 and 2014, however was on the rise again in 2015. All the percentages for Pittsylvania – Danville have been below the state's percentages which hover around the mid – high 80% mark.

The chart below contains seatbelt usage comparison data for neighboring health districts for years 2014 and 2015.

Seatbelt Usage Comparison	2014	2015
Pittsylvania- Danville Health District	75.40%	83.30%
West Piedmont Health District	79.9%	85.9%
Central Virginia Health District	90.9%	88.9%

Cancer

Cancer was the leading cause of death in Caswell County for 2015[lv] and Pittsylvania County in 2013. Furthermore, it was the second leading cause of death for Danville 2013[lvi].

In 2013 the Pittsylvania – Danville Health District had a lower cancer incidence rate (all sites) than the state. However, the health district saw a higher death rate for that same year. Meaning that cancer, is fatal to a greater proportion of residents in the Pittsylvania – Danville Health District, than at the state level.

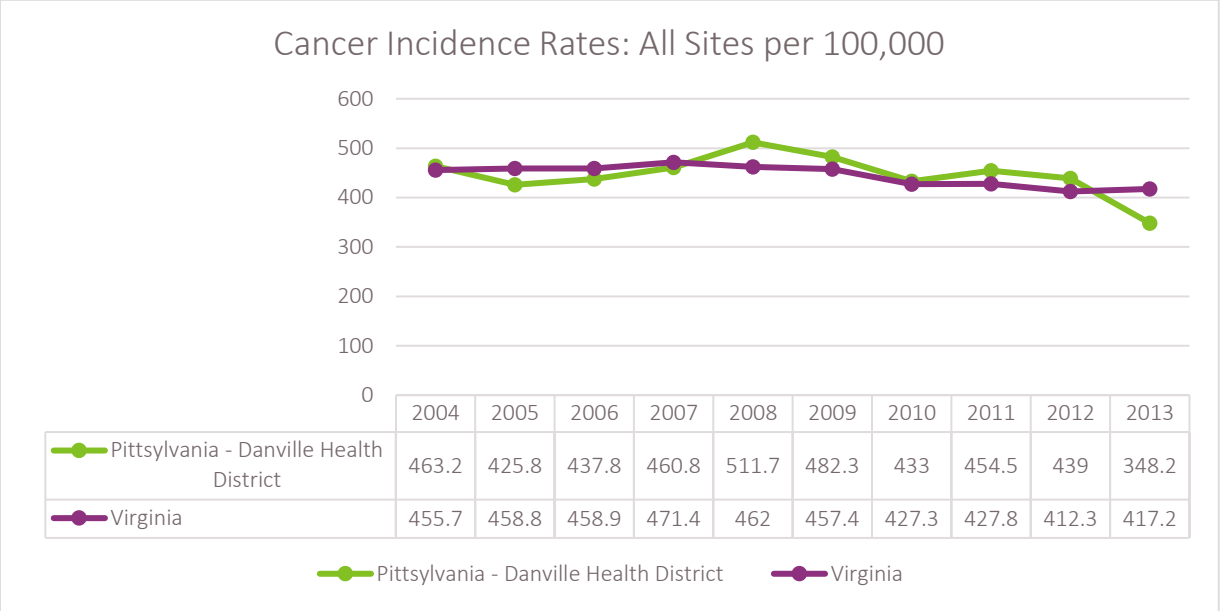
Pittsylvania- Danville HD Cancer Death Rate 2013 (per 100,000)[lvii]	State of Virginia Cancer Death Rate 2013 (per 100,000)
189.5	161.3

Cancer was also covered on the community health survey, from which the following information was collected. 7.10% of 396 survey respondents stated that they had been told by a healthcare professional that they have/ had cancer. In addition, among 375 survey participants, cancer received 141 votes as a top issue impacting personal and family health. When asked the same question about top health issues, but with a focus on community health 393 participants voted for cancer 142 times. Furthermore, 395 survey participants when asked about what medical specialties were needed in the area responded with various answers, including 114 votes for cancer/ oncology.

The focus groups also participated in the same activity of voting for the top issues that they felt impacted community health. When totaling votes across the region, 57 focus group participants voted 22 times for cancer, with 14 of those votes coming from residents of Pittsylvania County. When discussing barriers to cancer care, focus group participants brought forth the concepts of cost of care, lack of service providers nearby, lack of support system, transportation, and the lack of education and awareness around cancer screenings.

Taking a deeper look at cancer and its impact on the community, the data presented on the following pages looks at both incidence and death rates for cancer: all sites, colon and rectum, female breast, lung and bronchus and prostate cancers.

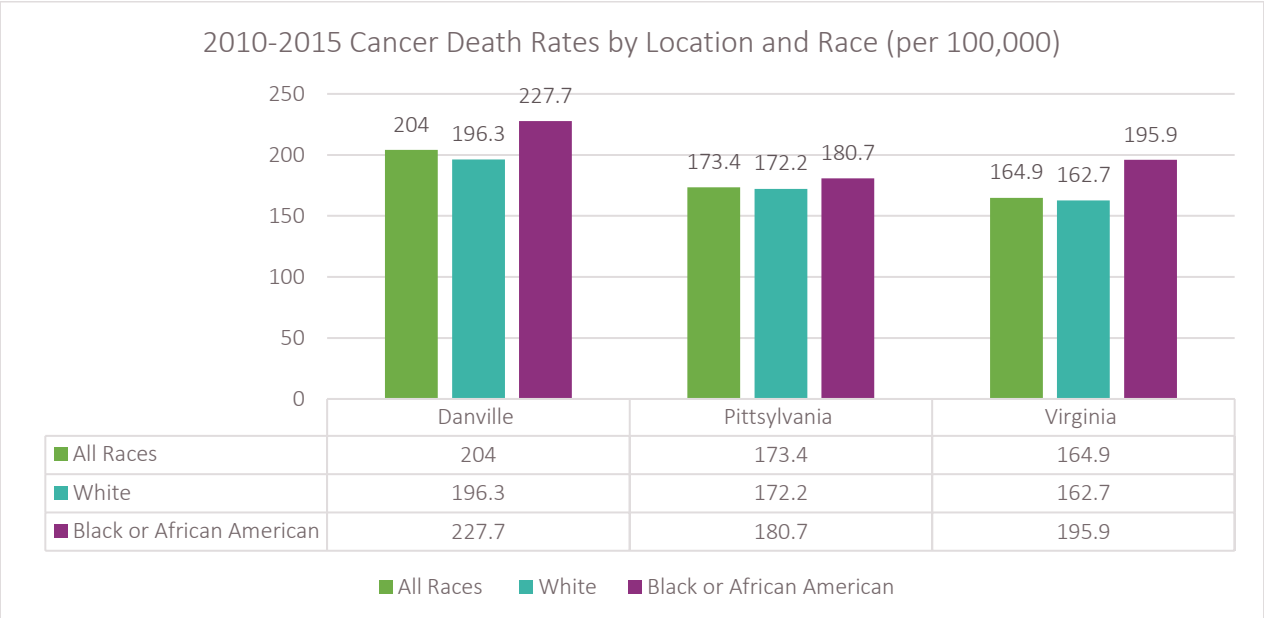
All Sites: Incidence and Death Rates



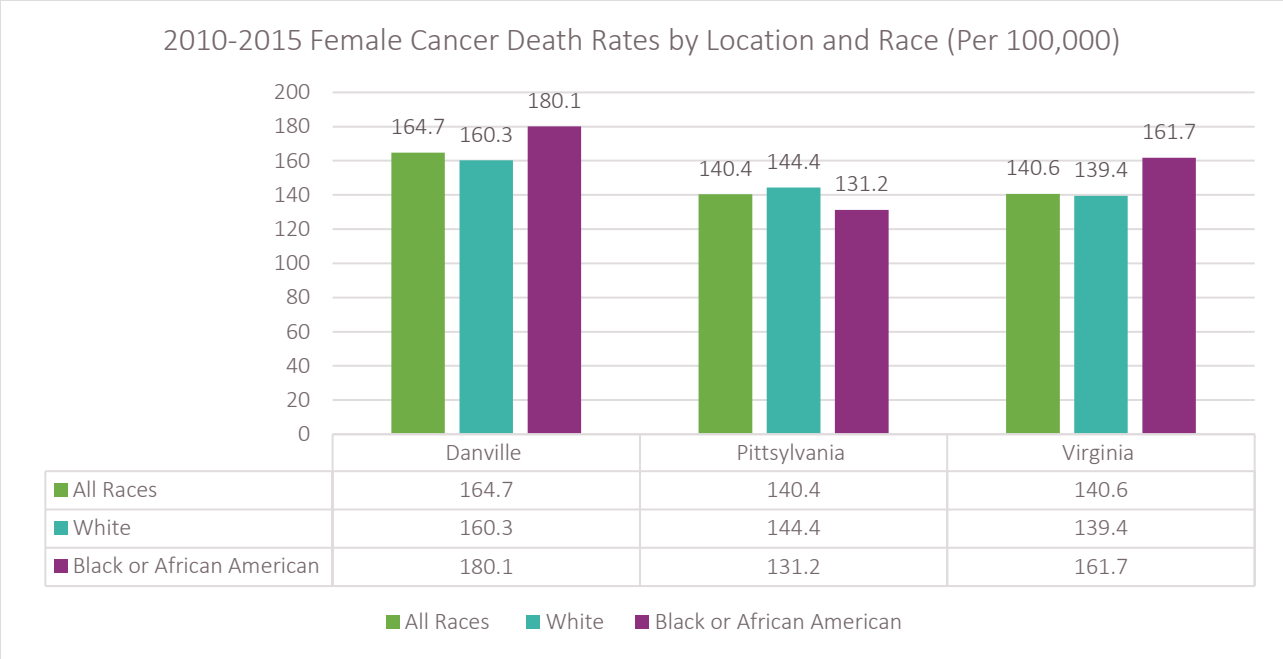
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pittsylvania - Danville Health District	463.2	425.8	437.8	460.8	511.7	482.3	433	454.5	439	348.2
Virginia	455.7	458.8	458.9	471.4	462	457.4	427.3	427.8	412.3	417.2

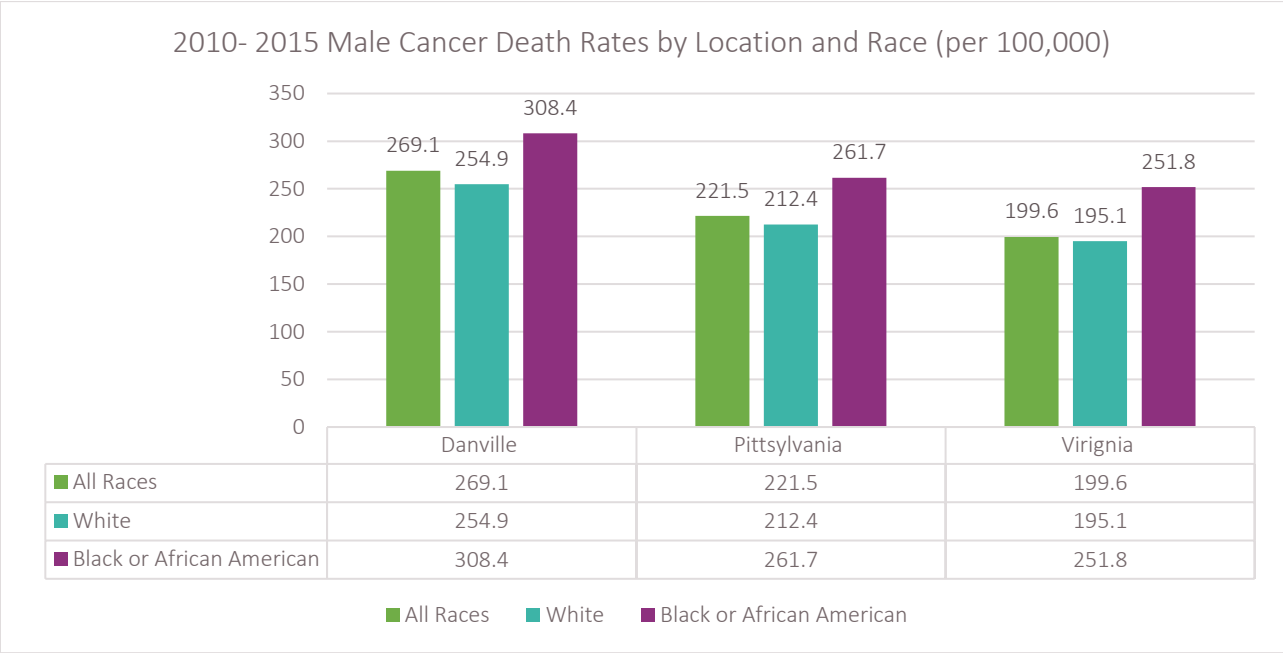
The entangled trend lines for all sites of cancer incidence rates from 2004 – 2013 show somewhat similar trends between the Pittsylvania – Danville Health District and the state of Virginia[lviii]. Although, there has been slightly more variance within the incidence rates for the Pittsylvania – Danville Health District. The highest incidence rates for both the state and Pittsylvania – Danville was in 2008 with rates of 462 and 511.7 per 100,000 respectively. The lowest incidence rate for Pittsylvania – Danville was in 2013 with a rate of 348.2 per 100,000. To understand the relationship between cancer incidence rates and death rates, the following graphs break down all sites cancer death rates by locality, sex and race.

All Sites Cancer Death Rates by Sex, Location and Race[lix]



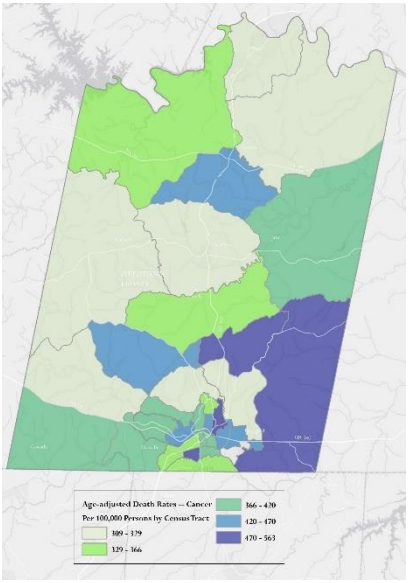
	Danville	Pittsylvania	Virginia
All Races	204	173.4	164.9
White	196.3	172.2	162.7
Black or African American	227.7	180.7	195.9


2010-2015 Female Cancer Death Rates by Location and Race (Per 100,000)
200
180
160
140
120
100
80
60
40
20
0
164.7
160.3
180.1
140.4
144.4
131.2
140.6
139.4
161.7
Danville
Pittsylvania
Virginia
All Races 164.7 140.4 140.6
White 160.3 144.4 139.4
Black or African American 180.1 131.2 161.7
All Races
White
Black or African American

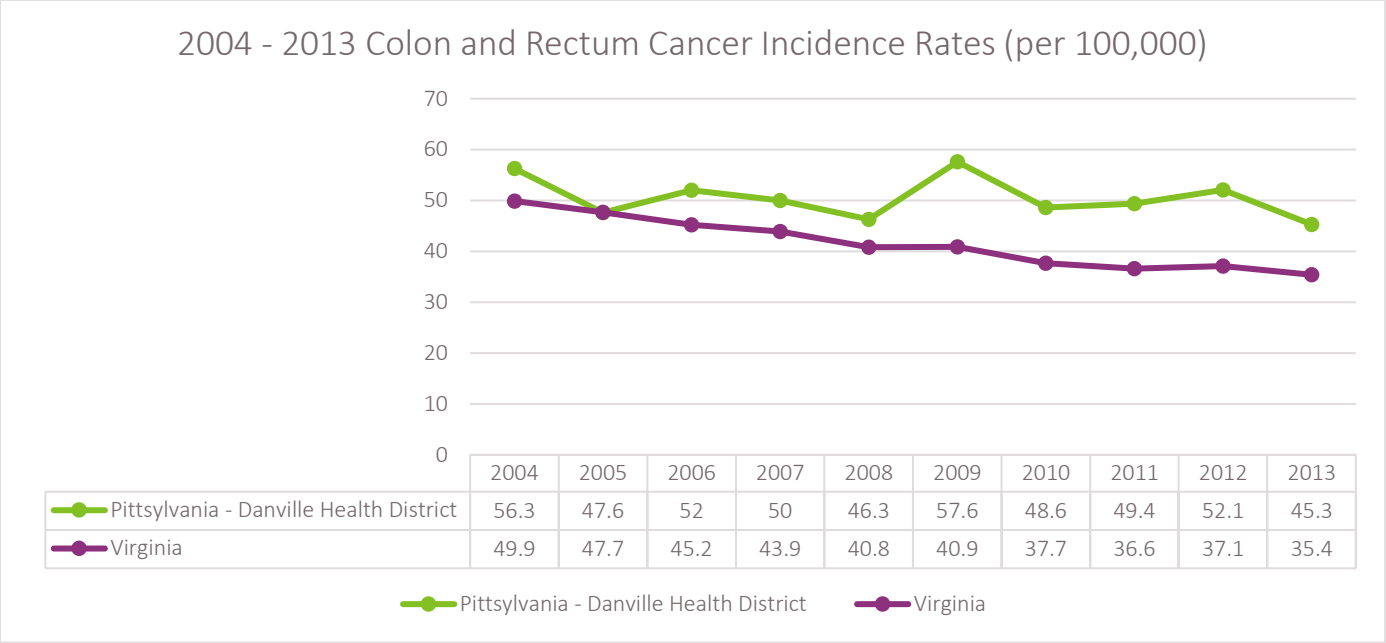

2010- 2015 Male Cancer Death Rates by Location and Race (per 100,000)
350
300
250
200
150
100
50
0
269.1
254.9
308.4
221.5
212.4
261.7
199.6
195.1
251.8
Danville
Pittsylvania
Virignia
All Races 269.1 221.5 199.6
White 254.9 212.4 195.1
Black or African American 308.4 261.7 251.8
All Races
White
Black or African American

To summarize the three charts above, the breakdown of place, sex and race allows for more targeted information surrounding cancer deaths. Each rate has been calculated per 100,000 to make them comparable with each other, to the rates of other places, and the rates of other causes of death. What these three charts show that Danville has the highest overall cancer death rate at 204 per 100,000. In addition, African Americans have the highest overall cancer death rates in all localities listed, except for African American females in Pittsylvania County. African American males within the City of Danville had the highest cancer death rate at 308.4 per 100,000. This is compared to the state's rate of 251.8 per 100,000.

Another viewpoint to study cancer death rates in Pittsylvania – Danville Health District is to look at census tracts. The map to the right is a preview of the Age-Adjusted Cancer Death Rates per 100,000 by census tract for the City of Danville and Pittsylvania County. To see more, reference the 2017 Health Equity Report, page 18.



Colon and Rectum Cancer: Incidence and Death Rates



The colon and rectum cancer incidence rates for the Pittsylvania – Danville Health District are higher than those for the state of Virginia for all years except 2005. In the years covered by the trend chart above, the highest incidence rate for colorectal cancer for the health district was in 2009 with a rate of 57.6 per 100,000, which equated to 85 cases[lx]. 2013 had the lowest colorectal cancer incidence rate for the health district at 45.3 per 100,000, which equated to 70 cases. The following tables break down colorectal cancer death rates by locality, sex and race using the 2010-2015 six-year rate.

Colorectal Cancer Death Rates by Location, Sex and Race

Colorectal Cancer Death Rates (Per 100,000) 2010- 2015 [lxi]						
	All Races[2] and Sexes		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	93	25	58	25.8	34	26.1
Pittsylvania	91	17.1	71	17	20	17.9
Virginia	7,518	14.4	5,555	13.5	1,770	20.3

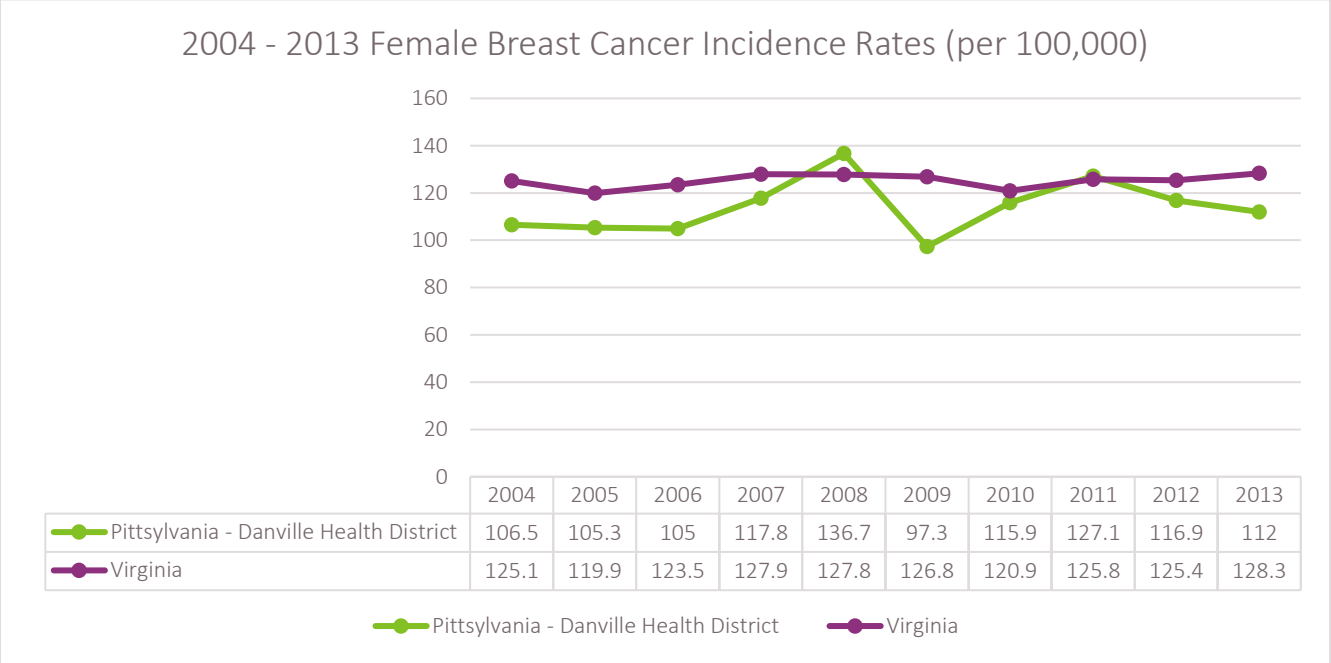
Female Colorectal Cancer Death Rates (Per 100,000) 2010- 2015						
	Female All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	48	22.4	32	26.7	15	Unreliable
Pittsylvania	47	15.8	38	16.7	Suppressed	Suppressed
Virginia	3,577	12.1	2,635	11.4	849	16.7

[2] All race information on this page includes those who are of Hispanic / Latino origin

Male Colorectal Cancer Death Rates (Per 100,000) 2010- 2015						
	Male All Races[3]		White/ Caucasian		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	45	29.2	26	26.3	19	Unreliable
Pittsylvania	44	18.2	33	16.7	11	Unreliable
Virginia	3,941	17.1	2,920	15.9	921	24.5

To summarize these three tables, the City of Danville has a significantly higher colorectal cancer death rate than the state (25 per 100,000 compared to 14.4 per 100,000). When breaking the death rate down by race, African Americans has a slightly higher death rate. When applying the lens of sex, males in Danville have the highest overall death rate at 29.2 per 100,000. However, when applying location, sex and race lenses, White females in Danville have the highest death rate at 26.7 per 100,000.

Female Breast Cancer: Incidence and Death Rates



When looking at the female breast cancer incidence rates for the years 2004 - 2013, it shows that generally the Pittsylvania – Danville Health District had a lower female breast cancer incidence rate than the state[lxii]. The years 2008 and 2011 were the two exceptions. Furthermore, the variance in rates at both the health district and state level are such that a continued trend of increase or decline is not easily discernable. This being said, the incidence rates for the health district have declined since the 2011 rate of 127.1 to 116.9 per 100,000 in 2012 and 112 per 100,000 in 2013. To understand the relationship

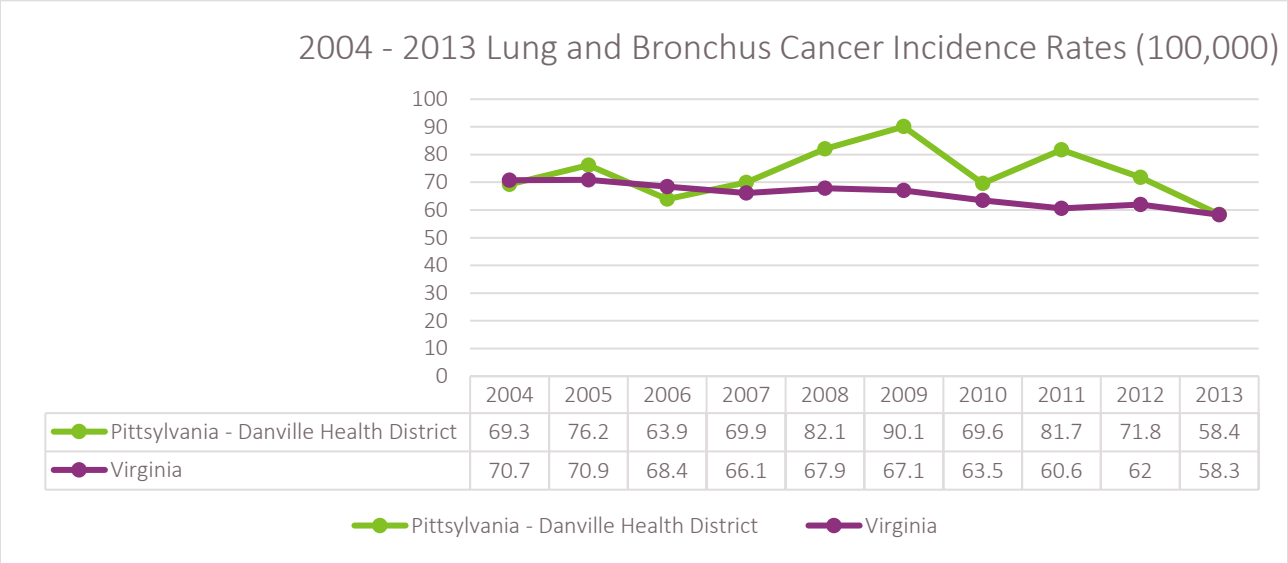
[3] All race information on this page includes those who are of Hispanic / Latino origin

between cancer incidence rates and death rates, the following tables break down female breast cancer death rates by locality and race.

Female Breast Cancer Death Rates (Per 100,000) 2010- 2015[lxiii]						
	Female All Races[4]		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	54	27.3	29	25.5	25	35
Pittsylvania	54	18.5	39	17.2	15	Unreliable
Virginia	6,461	21.9	4,735	20.8	1,584	29.9

In looking at the death rates for 2010 – 2015, Danville has the highest rate at 27.3 per 100,000. In addition, African Americans have the highest rate among the city's female population. Overall, Pittsylvania County rates are lower than both Danville's and the state's rates. Due to the low number of African American deaths due to breast cancer, a reliable rate could not be calculated for the 2010-2015 timeframe.

Lung and Bronchus Cancer: Incidence and Death Rates



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pittsylvania - Danville Health District	69.3	76.2	63.9	69.9	82.1	90.1	69.6	81.7	71.8	58.4
Virginia	70.7	70.9	68.4	66.1	67.9	67.1	63.5	60.6	62	58.3

As with other types of cancer discussed above, the Pittsylvania – Danville Health District has lung and bronchus cancer incidence rates that are generally higher than the state's rate[lxiv]. The health district's highest rate was in 2009 with a rate of 90.1 per 100,000; with the lowest occurred in 2013 with a rate of 58.4 per 100,000. These rates equated to 134 and 94 cases respectively. To understand the relationship between cancer incidence rates and death rates, the following tables break down lung and bronchus cancer death rates by locality, sex and race.

[4] All race information on this page includes those who are of Hispanic / Latino origin

Lung and Bronchus Cancer Death Rates (Per 100,000) 2010- 2015[lxv]						
	All Races[5] and Sexes		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	203	52.7	131	53.5	72	53.4
Pittsylvania	282	50.7	229	52.6	51	42.6
Virginia	23,677	44.7	18,972	45.3	4,207	48

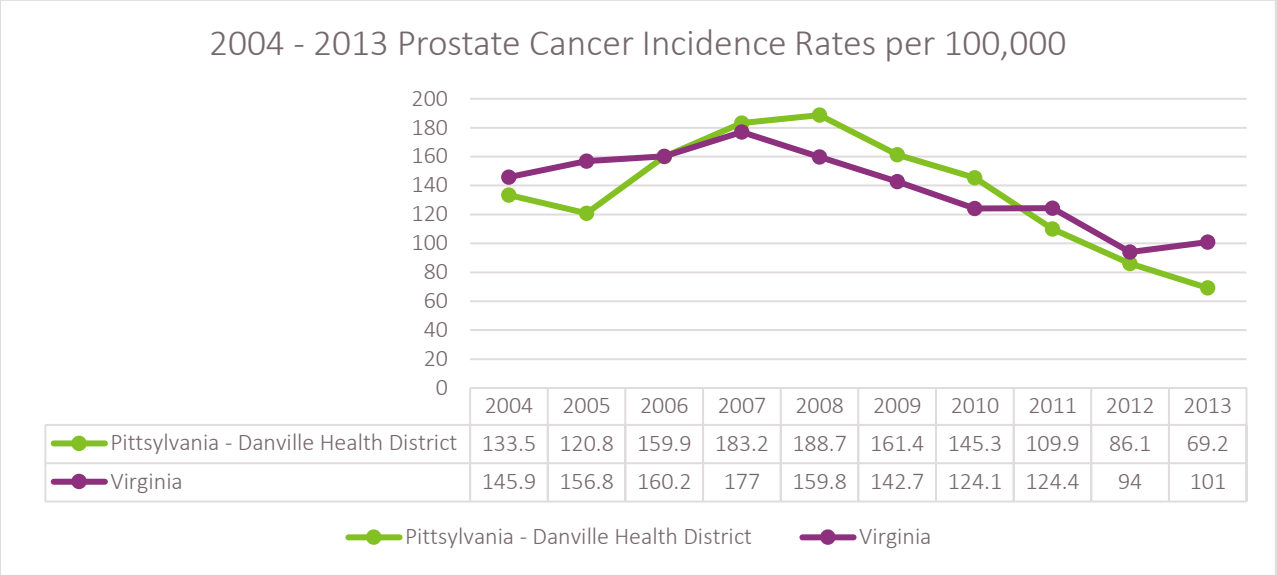
Female Lung and Bronchus Cancer Death Rates (Per 100,000) 2010- 2015						
	Female All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	88	38	54	37.8	34	42
Pittsylvania	109	37	96	41.8	13	Unreliable
Virginia	10,535	35.8	8,561	37.3	1,758	34.6

Male Lung and Bronchus Cancer Death Rates (Per 100,000) 2010- 2015						
	Male All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	115	75.2	77	77.4	38	69.8
Pittsylvania	173	68.2	133	67	38	70.6
Virginia	13,142	56.3	10,411	55.7	2,449	67.7

When applying the lens of place, both Danville and Pittsylvania have higher lung and bronchus death rates than the state. When adding the lens of race to that of place, Whites have the highest death rate at 53.5 per 100,000 followed closely by African Americans at 53.4 per 100,000. When looking at sex and place, males in Danville have the highest lung and bronchus death rates. Furthermore, when using place, sex and race to filter lung and bronchus death rates, White males in City of Danville have the highest death rate at 77.4 per 100,000.

[5] All race information on this page includes those who are of Hispanic / Latino origin

Prostate Cancer: Incidence and Death Rates



The 2004 – 2013 Prostate Cancer Incidence rates for the Pittsylvania – Danville Health District, show a decline since reaching its peak in 2008[lxvi]. In 2008, the incidence rate was 188.7 per 100,000 which equates to 126 cases. 2013 has the lowest cancer incidence rate for the health district at 69.2 per 100,000, or 52 cases. This is compared to the state's rate of 101 per 100,000 in 2013. To understand the relationship between cancer incidence rates and death rates, the following tables break down prostate cancer death rates by locality and race.

Male Prostate Cancer Death Rates (Per 100,000) 2010- 2015[lxvii]						
	Male All Races[6]		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	40	26.8	18	Unreliable	22	52
Pittsylvania	51	25	31	20.3	20	43.9
Virginia	4,110	20.5	2.846	17.5	1,199	41.9

When applying the lens of place to the death rate data, Danville has the highest death rate at 26.8. It is followed by Pittsylvania County at 25 per 100,000. Both are higher than the state rate. When applying race and place lenses, African Americans in the City of Danville have the highest rate at 52 per 100,000. This is much higher than the state's rate of 41.9.

[6] All race information on this page includes those who are of Hispanic / Latino origin

Cancer Conclusion

The Pittsylvania – Danville Health District had a lower all sites cancer, prostate cancer, and female breast cancer incidence rate than the state through the years, however, the cancer death rate data, was steadily higher than the state's. This is especially true for the City of Danville where, every cancer death rate reviewed in this section was higher than the state's. Meaning that while a smaller rate/ proportion of the community is experiencing cancer, a higher portion of those occurrences are fatal.

Per the Centers for Disease Control and Prevention, "a person's cancer risk can be reduced with healthy choices like avoiding tobacco, limiting alcohol use, protecting your skin from the sun and avoiding indoor tanning, eating a diet rich in fruit and vegetables, keeping a healthy weight and being physically active[lxviii]". Many of the health behaviors discussed above do not have high levels of participation rates within the Pittsylvania - Danville Health District. To have a positive impact on health outcomes, increasing healthy behaviors is imperative. This means not only addressing individual behavior, but also removing barriers that stand in the way of healthy behavior participation. These barriers include, but are not limited to poverty, cost of care, access to care, access to healthy foods and physical activity opportunities, health literacy, transportation and stable, quality housing. To learn more about these barriers, please refer to the 2017 Health Equity Report, which explores the impact of the Social Determinants of Health on health outcomes in the Dan River Region.

Chronic Diseases

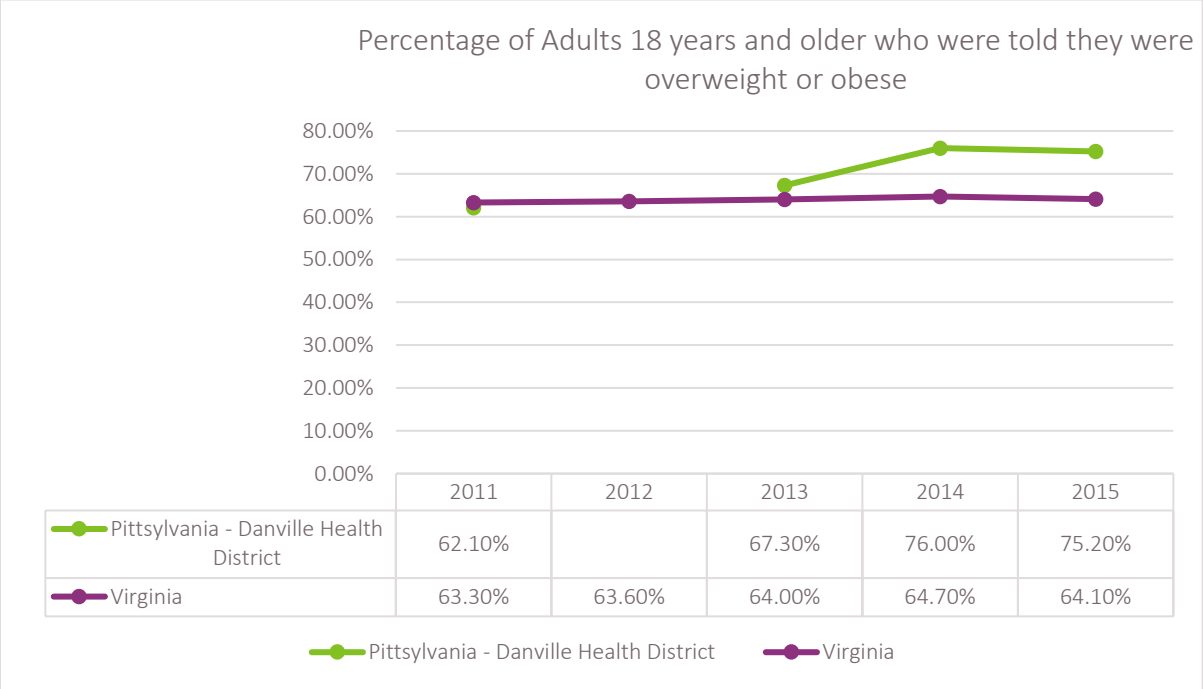
A chronic disease is a condition that lasts for longer than three months. As of 2012, approximately 40 million Americans suffered from one or more chronic health conditions that limited their day to day activities[lxix]. In addition, per the Centers for Disease Control and Prevention, chronic diseases are responsible for 70% of deaths each year and account for most of the nation's healthcare costs[lxx].

The chronic disease data reviewed below, continues to look into the health and wellness data for the Pittsylvania – Danville Health District. Many of the indicators are influenced by the health behaviors discussed previously.

Overweight & Obesity

Overweight and obesity are growing trends in both adults and in children. Overweight is defined as a BMI between 25 and 29.9, whereas obesity is marked by a BMI 30 or higher[lxxi]. In a 2015 debrief from the National Center of Health Statics, 36.5% of adults in the United States qualify as obese.[lxxii]

The chart below, pulls overweight and obesity data from the Virginia BRFSS. The trend chart below shows the percentage of adults aged 18 and over who were told by a healthcare professional that they were overweight or obese[lxxiii].



	2011	2012	2013	2014	2015
Pittsylvania - Danville Health District	62.10%		67.30%	76.00%	75.20%
Virginia	63.30%	63.60%	64.00%	64.70%	64.10%

From 2011 to 2015 in the Pittsylvania – Danville Health District there has been a general increase in the prevalence of adults being overweight or obese. In 2015, 3 out of every 4 adults 18 and over had been told by a healthcare professional that they were overweight or obese. This is compared to the state's percentage at 64.1. This high prevalence of overweight and obesity can have impacts on other chronic diseases such as heart disease, diabetes, stokes and other leading causes of preventable deaths[lxxiv].

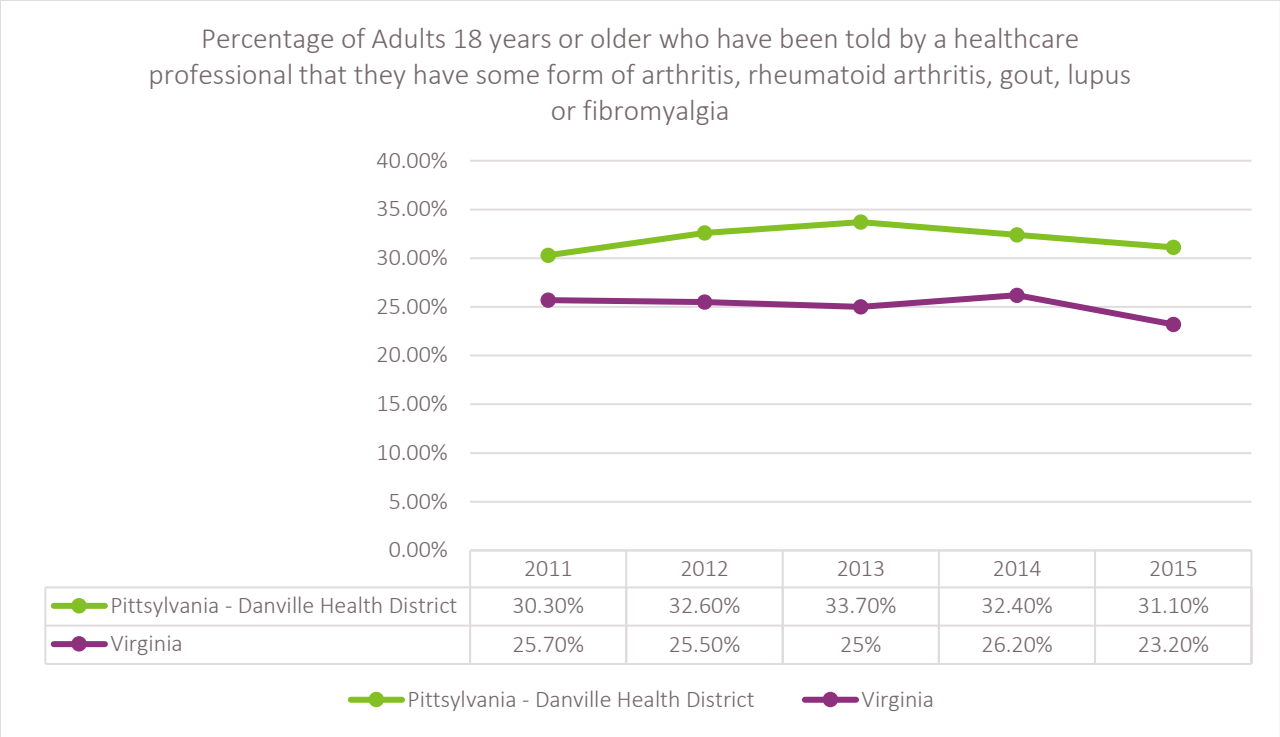
During the community engagement process, overweight and obesity rates were a concern of all three groups (survey respondents, key informants, and focus group participants). One of the initial questions

on the survey asked “have you ever been told by a healthcare provider that you have/ had any of the following conditions or health risks?” (Check all that apply). Of the 396 respondents 27.50% had been told that they are or had been overweight/ obese. Later in the survey, 378 respondents voted for obesity and overweight as a factor influencing personal and family health 182 times. Furthermore, when answering the same question focused on community health, 393 survey respondents voted for overweight and obesity 229 times. For both questions, overweight and obesity ranked first as an issue impacting health. During key informant interviews, a major theme under disease challenges, was obesity, especially the rising rate among youth in the community. The increasing incidents of childhood obesity and overall obesity were also recurring themes in the focus groups. In the voting exercise around issues impacting community health, 57 focus groups participants voted 34 times overweight and obesity, making it the number one issue impacting community health among participants. When talking about the challenges to obtaining and maintaining a healthy weight, focus group participants structured the conversation primarily around access to healthy food and physical activity opportunities. Region-wide barriers that came from these conversations included cost and the implications of poverty, location, lack of mobility (lack of, or limited public transportation, no access to vehicle), and safety.

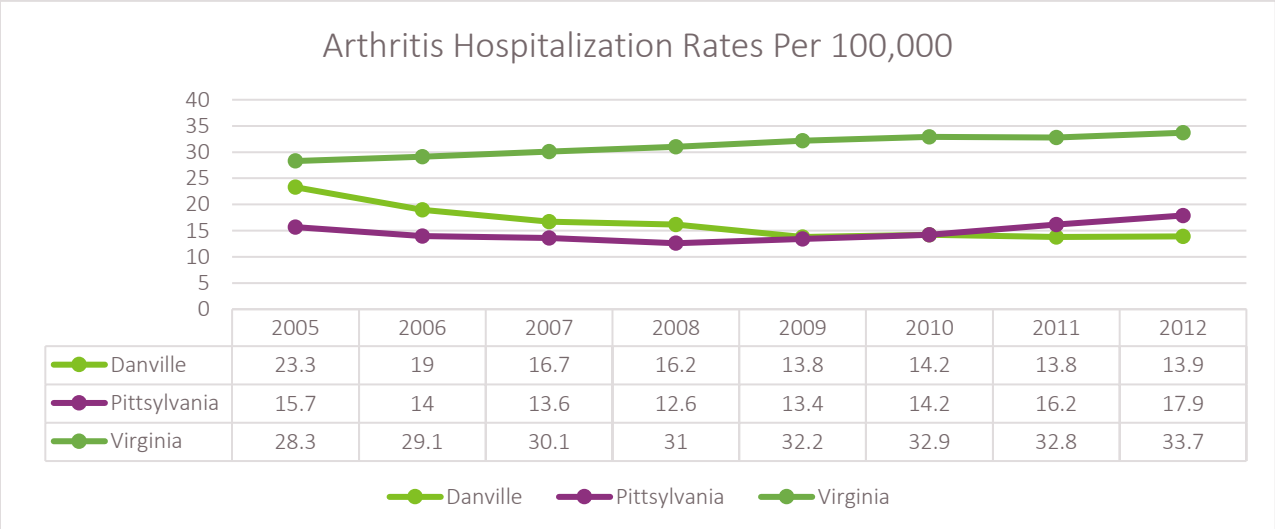
Arthritis Incidence and Hospitalization Rates

Arthritis is the inflammation of one or more joints. Today, the term is used to describe more than 100 conditions, which impact both joints and their surrounding tissues[lxxv]. These related conditions affect 54.4 million, (nearly 1 in 4) adults in the United States and is the leading cause of disability[lxxvi]. Furthermore, studies into the impacts of arthritis on rural populations shows that 1 in 3 rural residents are impacted by arthritis and that “prevalence followed patterns previously reported for all adults with arthritis: higher prevalence among women, older adults, smokers, adults with less education, adults who are less physical active, or adults with higher body mass index[lxxvii].”

The chart below looks at a 5-year span of percentages for arthritis prevalence in the Pittsylvania – Danville Health District. The prevalence of arthritis in the health district was 31.1% in 2015 compared to the state’s 23.20%. Over the 5 years, the prevalence of arthritis rose from 30.30% in 2011, to its peak in 2013 at 33.70% before declining slightly to its 2015 rate. The prevalence of arthritis at the state level has made an overall decline from its 2011 rate of 25.7% to 23.30% in 2015. On the Danville – Pittsylvania Community Health Survey, respondents were asked “have you ever been told by a healthcare professional that you have/ had any of the following conditions or health risks (check all that apply)?”. Of the 396 respondents, 25.3% indicated that they had been diagnosed with arthritis.



The chart below looks at the hospitalization rates[7] (per 100,000) for Danville, Pittsylvania County, and Virginia[lxxviii]. As indicated by the 2005 to 2012 data sets, arthritis hospitalizations at the state level are on the rise as well as those in Pittsylvania County. The hospitalization rate for the City of Danville, however has made a gradual decline.



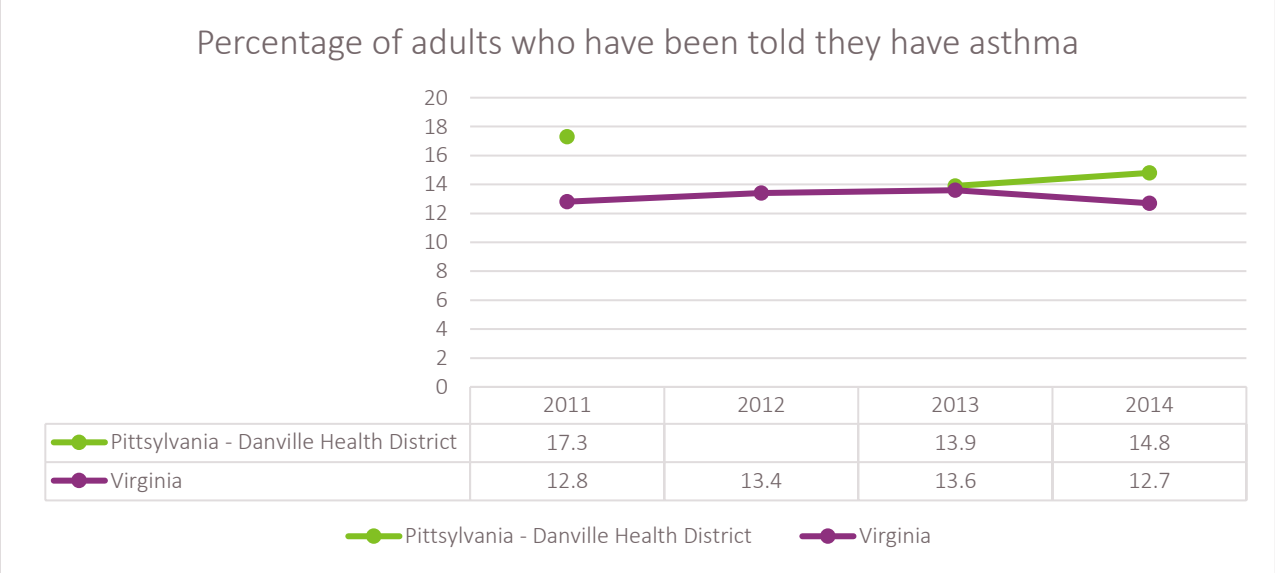
[7] For all hospitalization rates, Danville and Pittsylvania rates are 3-year rolling. Virginia's rate is a one year rate.

Providing further context around the impacts of hospitalization rates due to arthritis, are the total charges occurred during hospital stays[8]. In 2012, spread over 131 hospital visits, residents of Pittsylvania County had hospital charges totaling $5,387, 024[9] for arthritis care. In Danville for 2012, residents acquired hospital charges totaling $2,681,606 spread over 55 visits[lxxix].

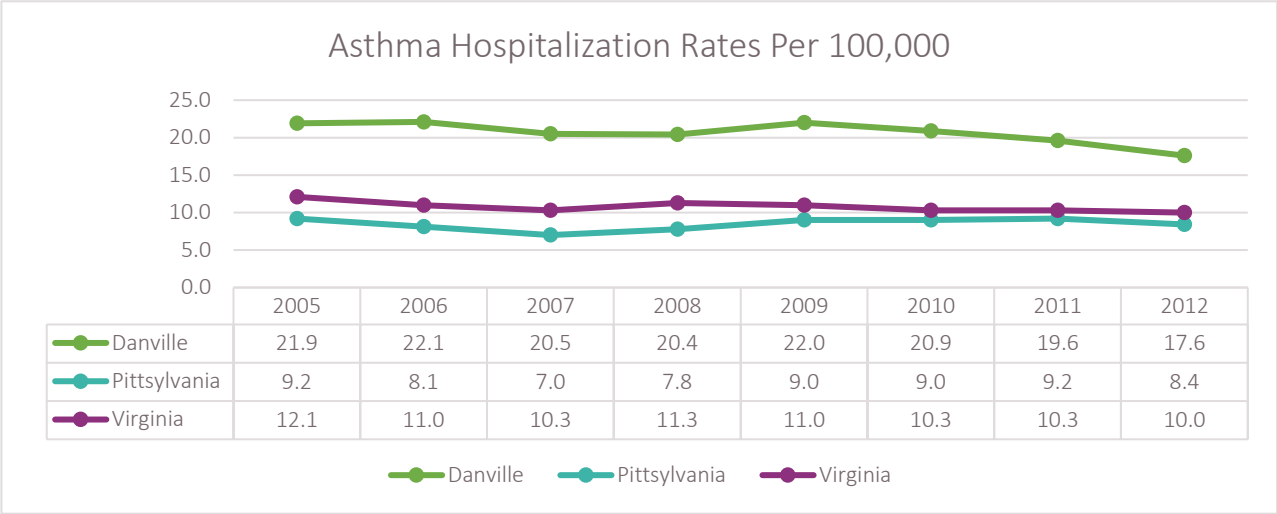
Asthma Incidence and Hospitalization Rates

"Asthma is a chronic disease that affects the airways in the lungs. During an asthma attack, airways become inflamed, making it hard to breathe.[lxxx]" While the cause of asthma is unknown, attacks are often triggered by events that irritate one's lungs including allergies, tobacco and other smoke, exercise and poor air quality. Beyond health impacts, asthma caused 10.5 million missed days of school and 14.2 million missed days of work in 2008[lxxxi].

The chart below looks at the percentage of adults aged 18 years or older who have been told that they have asthma by a healthcare professional from 2011 to 2014[lxxxii]. 2011 saw the highest percentage of BRFSS respondents reporting that they had been told that they had asthma. For all years in which data was collected, the Pittsylvania – Danville Health District had higher percentages of diagnosed adults. During the 2016 – 2017 Danville – Pittsylvania Community Health Survey, respondents were asked "have you ever been told by a healthcare professional that you have/ had any of the following conditions or health risks (check all that apply)?". Of the 396 respondents, 11.6% indicated that they had been diagnosed with asthma.



[8] Total hospital charges are the sum of billed charges of all hospitalizations for a chronic disease indicator. Total charges do not reflect total cost of hospitalization or the total amount paid by the patients for hospitalization.



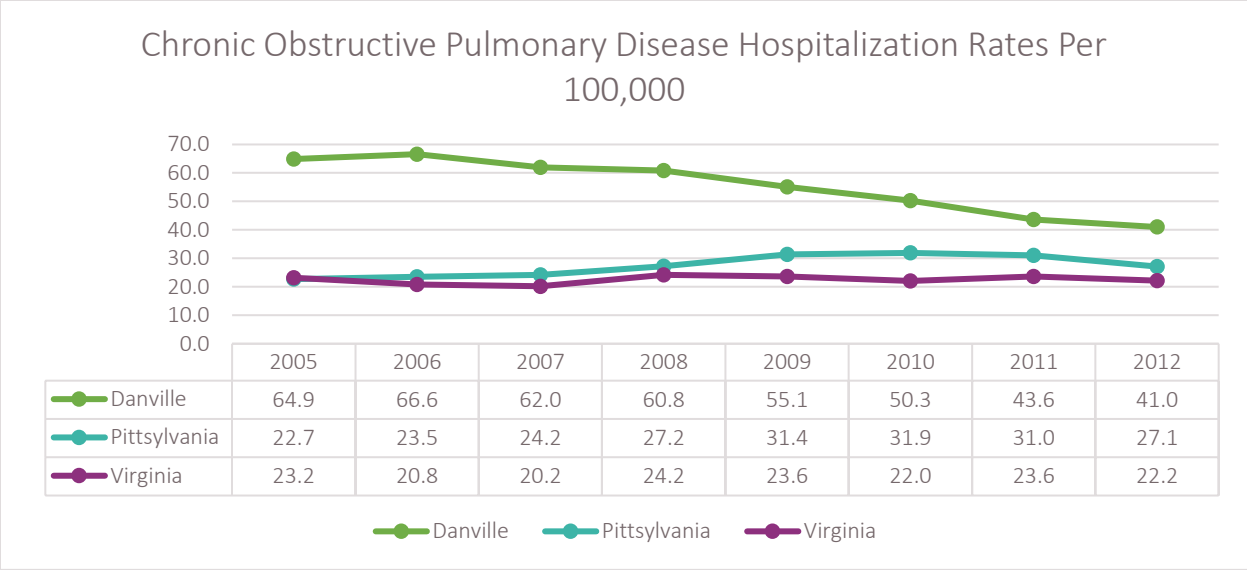
	2005	2006	2007	2008	2009	2010	2011	2012
Danville	21.9	22.1	20.5	20.4	22.0	20.9	19.6	17.6
Pittsylvania	9.2	8.1	7.0	7.8	9.0	9.0	9.2	8.4
Virginia	12.1	11.0	10.3	11.3	11.0	10.3	10.3	10.0

For the City of Danville, these higher asthma rates, have also lead to higher hospitalization rates than both Pittsylvania County and the state[lxxxiii]. Pittsylvania County has the lowest asthma hospitalization rates of the three localities. This being said, Pittsylvania County residents' asthma related hospital charges totaled $709,693 for 48 hospitalizations, while costs associated with the City of Danville totaled $756,629 spread over 55 visits in 2012.

Chronic Obstructive Pulmonary Disease Incidence, Hospitalization and Death

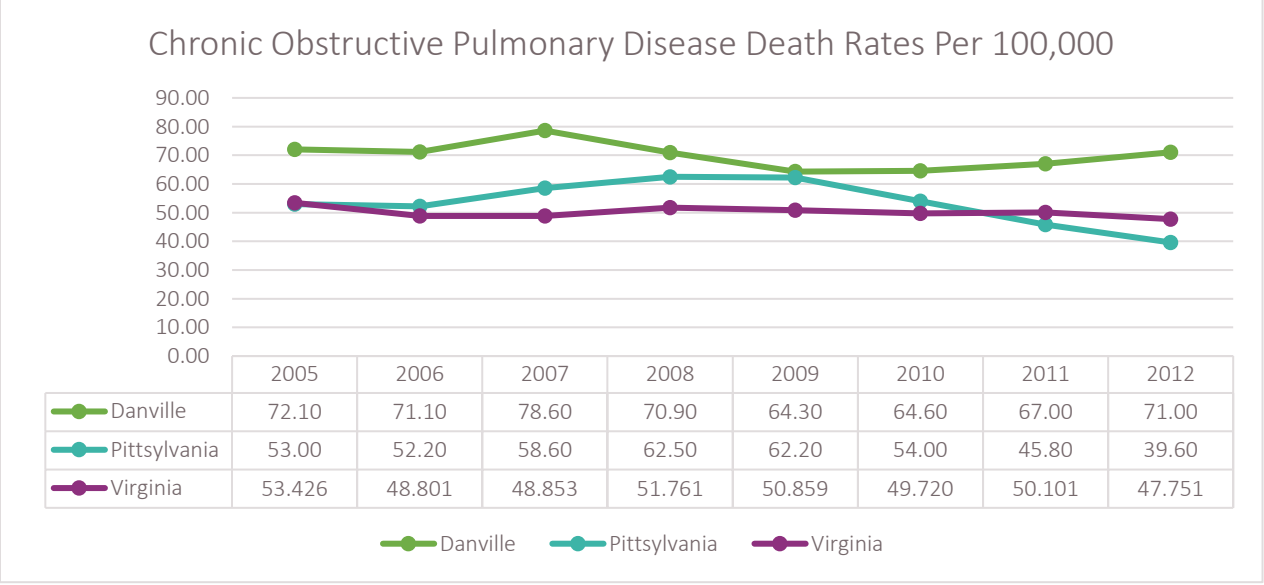
Chronic Obstructive Pulmonary Disease more commonly known as COPD is a "group of diseases that restrict air flow and cause trouble breathing.[lxxxiv]" In 2012, the Centers for Disease Control and Prevention estimated that 15 million Americans had been diagnosed with COPD, with the added potential that millions more were undiagnosed.

Based off the 2013-2014 Virginia BRFSS responses, an estimated 10.2% of residents in the Pittsylvania – Danville Health District had been told that had COPD, emphysema or chronic bronchitis[lxxxv], which is 1.57 greater than the overall percentage of Virginians diagnosed (6.5%) during that timeframe [lxxxvi]. In addition to having a higher incidence rate, both Danville and Pittsylvania County have hospitalization rates that are higher than the state's. In 2005, Danville's COPD related hospitalization rate was roughly 2.8 times greater than the state's. In 2006, the rate difference rose to 3.2 times greater. Since 2006, Danville has seen a steady decline in its COPD related hospitalizations. By 2012, the difference in rates between Danville and the state had dropped to 1.8 times greater. Pittsylvania County's hospitalizations rates, have been closer to that of Virginia's as indicated in the chart below. However, the county has seen an overall rise in its COPD Hospitalization rate going from 22.7 in 2005 to 27.1 in 2012. Furthermore, as a health district, these hospitalizations totaled $6,224, 425 in charges. $3, 419,191 in charges were tied to residents of Danville, and the remaining $2,805,261 to residents of Pittsylvania County[lxxxvii].



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	64.9	66.6	62.0	60.8	55.1	50.3	43.6	41.0
Pittsylvania	22.7	23.5	24.2	27.2	31.4	31.9	31.0	27.1
Virginia	23.2	20.8	20.2	24.2	23.6	22.0	23.6	22.2

Danville had the highest death rates of the three locations in the 2005 to 2012 timeframe[lxxxviii]. In 2005, Danville's COPD death rate was 72.10 per 100,000, which was 1.35 times greater than the state's rate of 53.426. The largest rate difference between Danville and the state occurred in 2007 when the city's COPD death rate (78.60) was 1.61 times higher than the state's rate. (48.853)[lxxxix]. As with the hospitalization rates, Pittsylvania County COPD death rates tend to be closer to state rates than those of Danville. The exception was when the County's rates peaked in 2008 at 62.50. Since then, the death rate for the county has steadily declined, falling below the state's death rate in both 2011 and 2012[xc].



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	72.10	71.10	78.60	70.90	64.30	64.60	67.00	71.00
Pittsylvania	53.00	52.20	58.60	62.50	62.20	54.00	45.80	39.60
Virginia	53.426	48.801	48.853	51.761	50.859	49.720	50.101	47.751

Chronic Lower Respiratory Diseases, are a collection of diseases including COPD and asthma. Chronic Lower Respiratory Diseases are a common cause of death in the United States[xci]. In 2015, it was the 3rd leading cause of death in the United States and North Carolina, while also being the 6th leading cause of death in Virginia[xcii]. In the Dan River Region, it was the 5th leading cause of death in the City of Danville and the 3rd leading cause of death in Pittsylvania County in 2013[xciii]. In breaking down Chronic Lower Respiratory Disease deaths, the filters of location, sex and race were applied.

2010-2015 Chronic Lower Respiratory Diseases Death Rates Per 100,000[xciv]						
	All Races[10] and sexes		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	197	49.1	149	119.7	48	37.3
Pittsylvania	184	34	159	54.9	25	20.8
Virginia	18,810	37.2	16,461	40.5	2,169	26.6

When looking at location, the City of Danville has the highest death rate at 49.1 per 100,000. This aligns with hospitalization and death rates tied to COPD, which is a common Chronic Lower Respiratory disease[xcv]. Pittsylvania County has the lowest death rate, which is supported by the continued decline of COPD deaths since 2009[xcvi]. When looking at place and race, those who are classified as White (including those of Hispanic decent) have a much higher rate than those in Pittsylvania County and the state. The Danville rate for Whites, including those of Hispanic, Latino decent, is 119.7, which is 2.96 times higher than the state rate and 2.18 times higher than Pittsylvania County[xcvii].

2010-2015 Female Chronic Lower Respiratory Diseases Death Rates Per 100,000[xcviii]						
	Female All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	104	39.8	84	47.4	20	24.9
Pittsylvania	83	27.2	76	32.1	Suppressed[11]	Suppressed
Virginia	10,226	34.7	9,143	39.1	1,004	20.5

Adding the filter of sex, the chart above looks at death rates for females by location and race. Overall the City of Danville has the highest rate of female deaths. Adding the race breakdown, White females (including those of Hispanic/ Latina decent) have the highest death rate of any female grouping.

2010-2015 Male Chronic Lower Respiratory Diseases Death Rates Per 100,000[xcix]						
	Male All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	93	62.8	65	67.1	28	58.3
Pittsylvania	101	45.3	83	47.2	18	Unreliable[12]
Virginia	8,584	41	7,318	42.9	1,165	37.2

[10] All race information on this page includes those who are of Hispanic / Latino origin
[11] Suppressed due to number of deaths (less than 10)
[12] Unreliable due to number of deaths (less than 20)

For males, the City of Danville has the highest rate of overall deaths. More specifically, White males in the City have the highest death rate. They also have the highest death rate when comparing males and females. The African American death rate for the city is still higher than the state rate by 1.57 times.

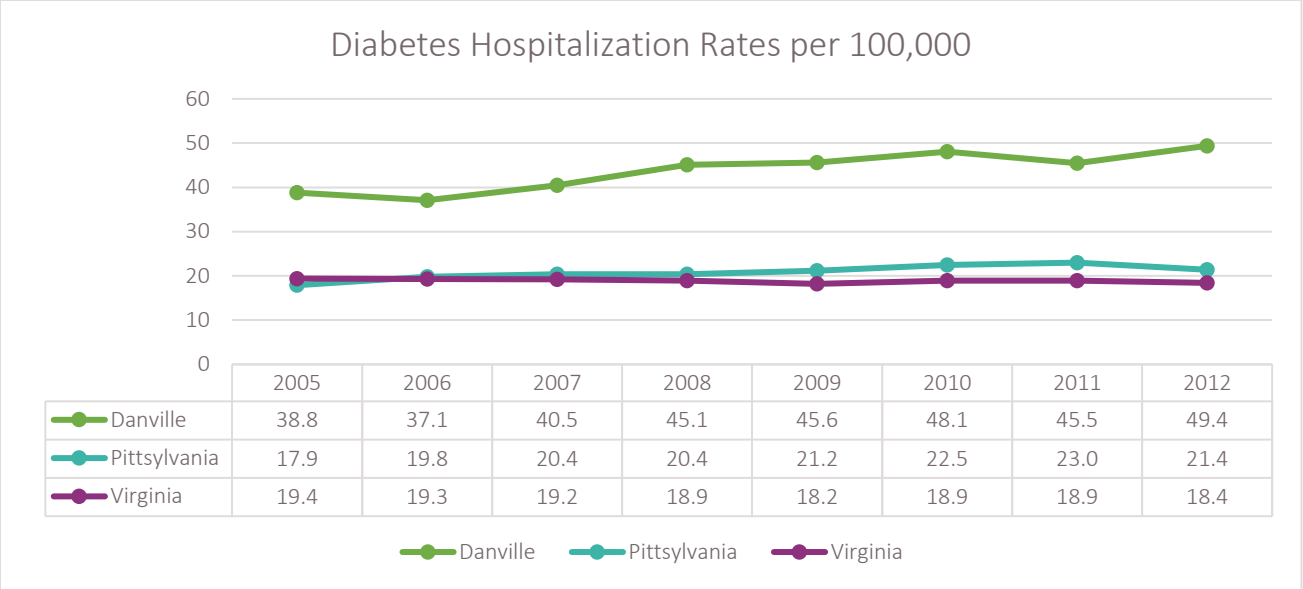
Diabetes Incidence, Hospitalization and Death Rates

"Diabetes is a disease in which blood glucose levels are above normal[c]." This buildup of glucose (sugar) occurs when (1) the pancreas does not make enough insulin, or (2) when they body does not absorb and use the insulin as well as it should be. The Centers for Disease Control and Prevention estimates that there are currently 29.1 million people in the United States with diabetes[ci]. In conjunction with high incidence rates are high death rates. In 2015, diabetes was the 7th leading cause of death nationwide[cii].

Since 2011 the Virginia BRFSS has tracked the percentage of adults 18 years or older who have been told by a healthcare professional that they have diabetes (excluding gestational diabetes)[ciii]. In the table below one can compare the Pittsylvania - Danville Health District numbers to that of the state. Over those 5 years, 2012 was the only year that the health district's percentage was lower than the state's. 2014 had not only the highest population percentage diagnosed with diabetes for the health district, it was also the lowest percentage year for the state[civ]. During the 2016 – 2017 Danville – Pittsylvania Community Health Survey, respondents were asked "have you ever been told by a healthcare professional that you have/ had any of the following conditions or health risks (check all that apply)?". Of the 396 respondents, 12.4% indicated that they had been diagnosed with diabetes.

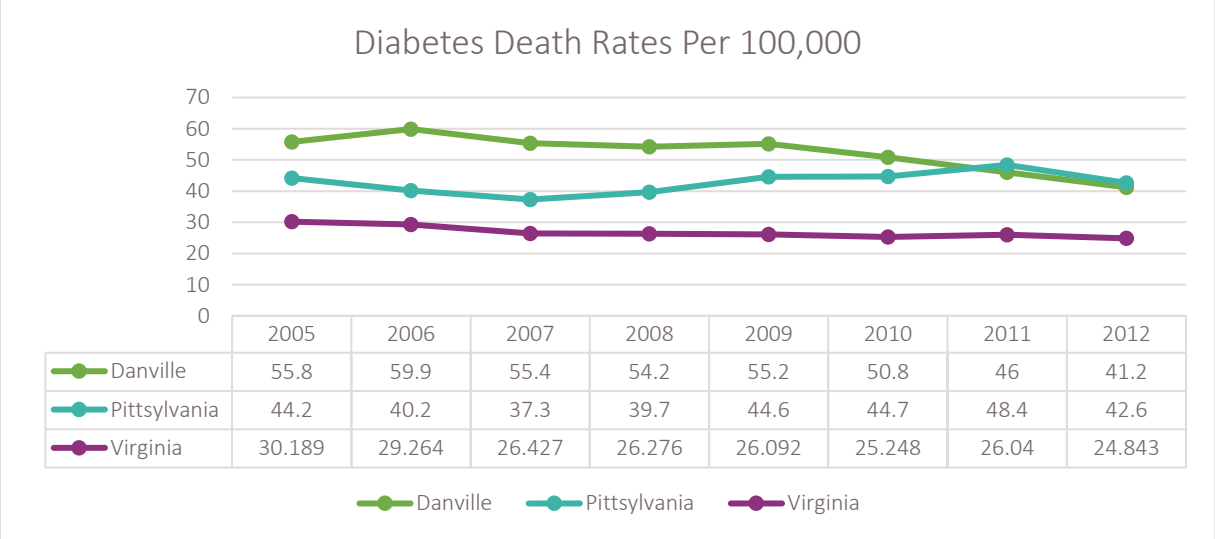
	2011	2012	2013	2014	2015
Pittsylvania - Danville Health District	13.40%	9.90%	18.10%	19.10%	11.40%
Virginia	10.40%	10.60%	9.80%	9.70%	10.30%

With high prevalence statistics, comes high hospitalization rates. Compared to Pittsylvania County and the state, the City of Danville has higher diabetes hospitalization rates, which have seen an overall increase over the eight years (chart on following page). In 2005, Danville's diabetes hospitalization rate was 2.17 times greater than Pittsylvania County's rate and 2 times greater than the state's rate. This is compared to 2012, when Danville's diabetes hospitalization rate was 2.31 times greater than Pittsylvania County 's and 2.68 times greater than the state's rate. Furthermore, patients in Danville had hospital charges totaling $3,802,499 in diabetes related visits[cv].



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	38.8	37.1	40.5	45.1	45.6	48.1	45.5	49.4
Pittsylvania	17.9	19.8	20.4	20.4	21.2	22.5	23.0	21.4
Virginia	19.4	19.3	19.2	18.9	18.2	18.9	18.9	18.4

Much like the at the national level, diabetes was in the top ten causes of death for both Danville and Pittsylvania County in 2013. In the city, it was tied for 8th with Kidney Diseases and was the 7th leading cause of death for Pittsylvania County[cvi]. The City of Danville generally has the highest death rates. However, unlike the hospitalization rates which are seeing a gradual incline, death rates are on the decline for the city. In 2011 and 2012, the city's rates fell below those of Pittsylvania County. However, Danville's 2012 rate of 41.2, although a decrease in deaths was still 1.66 times greater than the state's death rate. The greatest rate difference occurred in 2007, when Danville's death rate of 54.2 was 2.096 times greater than the state's rate of 26.427[cvii].



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	55.8	59.9	55.4	54.2	55.2	50.8	46	41.2
Pittsylvania	44.2	40.2	37.3	39.7	44.6	44.7	48.4	42.6
Virginia	30.189	29.264	26.427	26.276	26.092	25.248	26.04	24.843

To further identify how diabetes deaths are distributed throughout the region, the lenses of location, sex and race[13] were applied.

2010-2015 Diabetes Death Rates Per 100,000 [cviii]						
	All Races and Sexes		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	120	33.4	57	25.4	62	48.4
Pittsylvania	158	30.1	107	26.2	50	44.5
Virginia	10,129	19.3	6,854	16.6	2,997	35

Using 6 year rates from the Centers for Disease Control and Prevention, the City of Danville had the highest overall death rate at 33.4, which was 1.73 times greater than the state's rate. Looking at each location by race, African American populations have higher death rates than those who identify as White. The highest overall death rate by race and location were African Americans in the City of Danville.

2010- 2015 Female Diabetes Death Rates Per 100,000[cix]						
	Female All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	56	25.3	22	15.5	33	41.2
Pittsylvania	74	24.5	47	19.7	27	41.2
Virginia	4,734	15.9	3,100	17.3	1.508	29.9

The death rates were then analyzed up by sex. The chart above shows the female breakdown of deaths by location and race. Danville has the highest overall female death rate out of the three primary jurisdictions. However, when broken down by race, African American females are dying at rates almost 3 times that of the state rate. Whereas for White females, the City of Danville has the lowest overall death rate.

2010-2015 Male Diabetes Death Rates Per 100,000[cx]						
	Male All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	64	44.5	35	38	29	62.5
Pittsylvania	84	36.5	60	34.1	23	45.4
Virginia	5,395	23.4	3,754	20.4	1,489	42.1

In studying the distribution of male diabetes deaths, the City of Danville has the highest overall male death rate. This trend continues when breaking down the numbers even further. Adding race as a filter through which to view the distribution of deaths, shows that the African American death rate is higher

[13] All race information on this page includes those who are of Hispanic / Latino origin

across the board. In Danville, the rate difference between African American males and White males was 1.645 times greater.

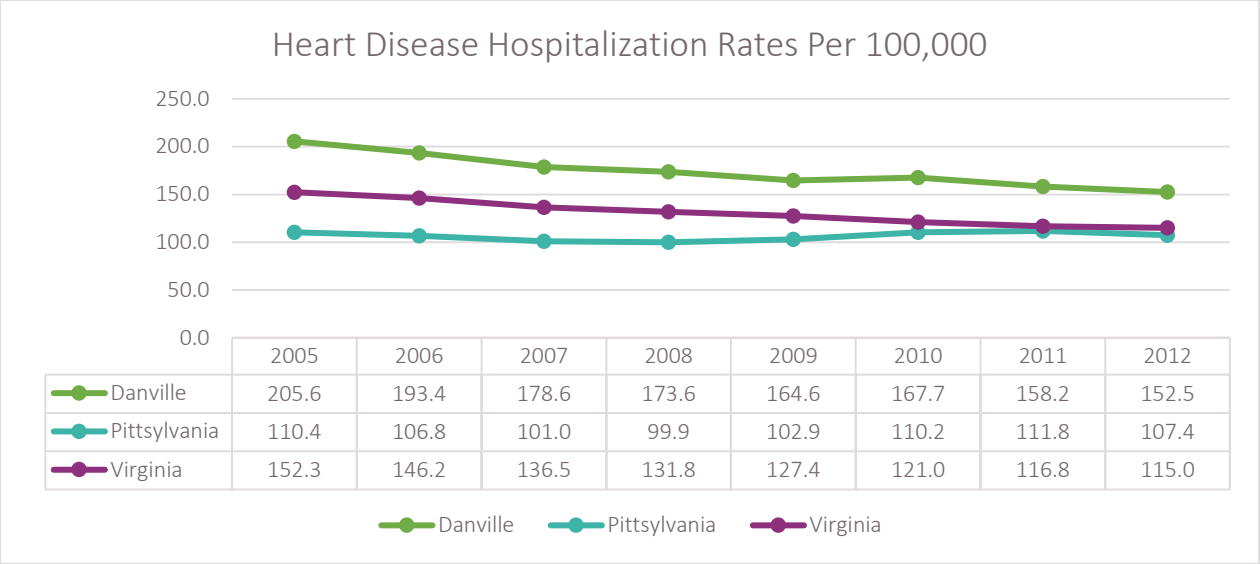
The high rates of incidence, hospitalizations and deaths supports the thoughts of participants in the community engagement process. When asked in the community health survey 378 respondents voted for diabetes 141 times as an issue impacting personal and family health. Later in the survey, 393 respondents voted for diabetes 135 times as a community health issue. When focus group attendees participated in the same voting exercise 57 participants voted 23 times for diabetes as a top community health issue. When discussing the challenges around diabetes management the following common themes emerged:

- Lack of access to healthy foods
- Lack of access to physical activity opportunities
- Lack of understanding on how to eat healthy for diabetes
- Confusion over how/when to monitor
- Access to testing supplies
- Non-compliance in medicine administration/ health literacy

Heart Disease: Incidence, Hospitalization and Death Rates

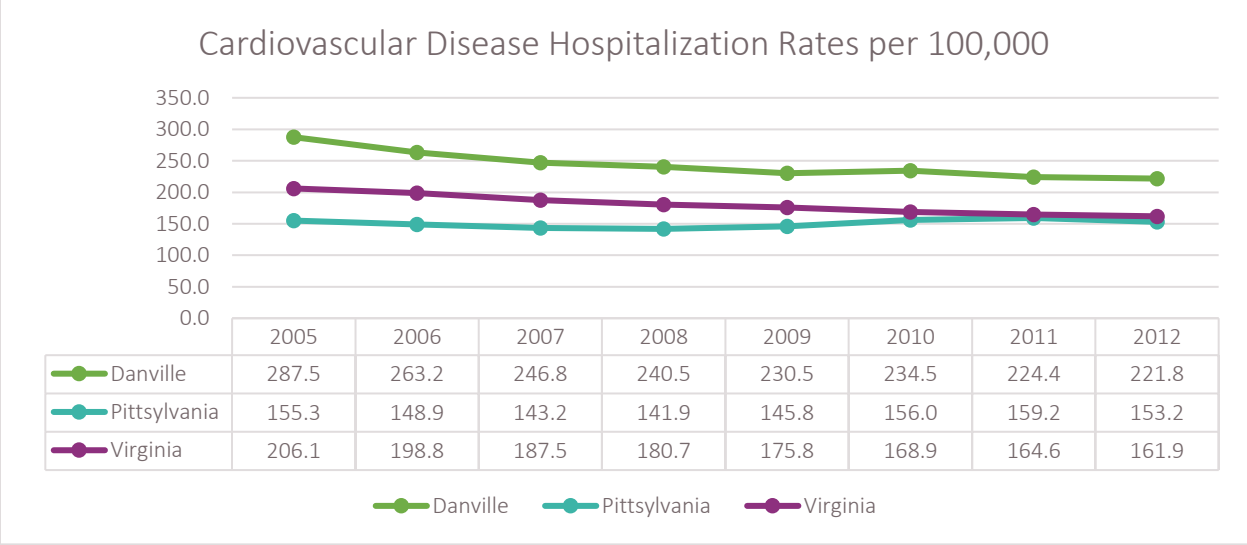
"The term 'heart disease' refers to several different heart conditions", the most common of which is Coronary heart disease[cxi]. In the United States, 1 in 4 deaths are from heart disease making it the number one cause of death for both men and women. Furthermore in 2015, it was calculated that every 42 seconds someone had a heart attack and that each minute someone died from a heart related-disease cause. In terms of financial impacts, heart diseases cost the United States approximately $207 billion per year in health care services, medicine and lost productivity[cxii].

For the Pittsylvania – Danville Health District, the three-year rates for those 18 years or older who have been told they have angina or coronary heart disease was 7.4% for data years 2011-2013. This is compared to the state rate of 4.1%[cxiii]. This higher incidence rate leads to higher hospitalization rates for the City of Danville. However, Pittsylvania County generally has a lower hospitalization rate than the state. In the years provided in the chart below, Danville in 2005 had the highest rate of hospitalization at 205.6[cxiv]. The lowest hospitalization rate for heart disease in the city can be found in 2012 at 152.5 per 100,000. In looking at Pittsylvania County, while the rates are lower than the state, it is steadily increasing and getting closer to reaching the state's hospitalization rates.



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	205.6	193.4	178.6	173.6	164.6	167.7	158.2	152.5
Pittsylvania	110.4	106.8	101.0	99.9	102.9	110.2	111.8	107.4
Virginia	152.3	146.2	136.5	131.8	127.4	121.0	116.8	115.0

In addition to heart disease, the Virginia Department of Heath also looks at cardiovascular disease hospitalization rates. In this instance the difference in heart disease and cardiovascular diseases are the types of cases that are catalogued under each. Cardiovascular diseases include "rheumatic fever with heart involvement, diseases of mitral, aortic valves, and other endocardial structures, essential and secondary hypertension, hypertensive heart disease, hypertension with or without renal disease, myocardial infarction, ischemic heart disease, angina, coronary atherosclerosis, pulmonary heart disease, pericarditis, endocarditis, myocarditis, cardiomyopathy, conduction disorders, cardiac dysrhythmias, heart failure, subarachnoid, intracerebral, and other types of hemorrhages, occlusion of cerebral arteries, transient cerebral ischemia, cerebrovascular diseases, atherosclerosis, aortic aneurysm, arterial embolism, and thrombosis, disease of capillaries, and septic arterial embolism.[cxv]"



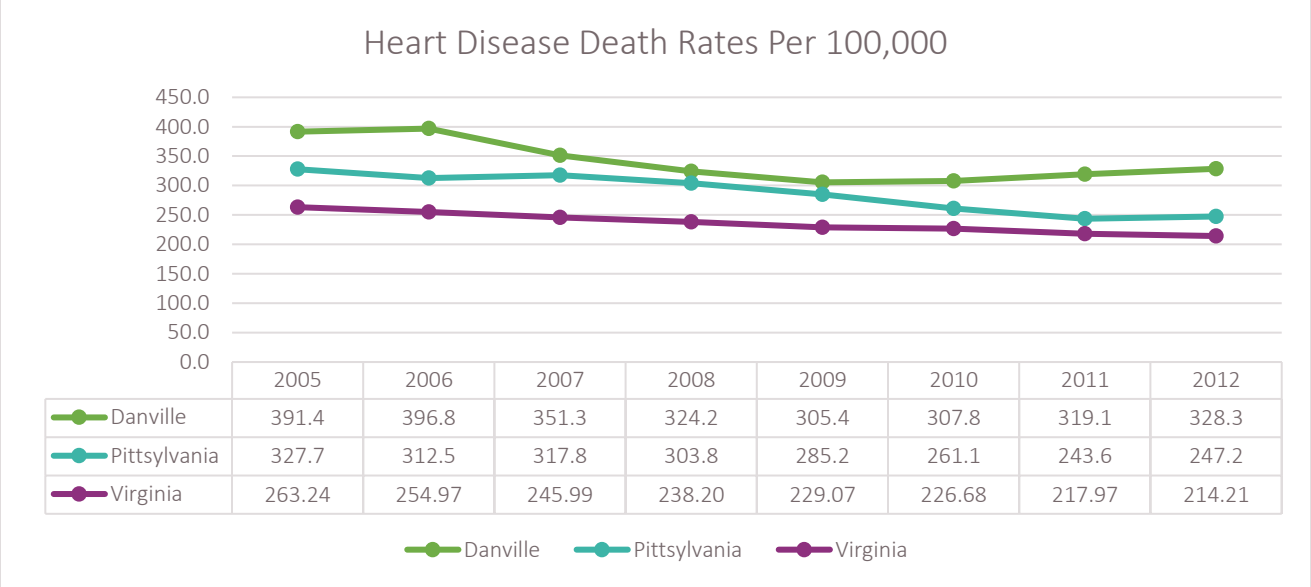
	2005	2006	2007	2008	2009	2010	2011	2012
Danville	287.5	263.2	246.8	240.5	230.5	234.5	224.4	221.8
Pittsylvania	155.3	148.9	143.2	141.9	145.8	156.0	159.2	153.2
Virginia	206.1	198.8	187.5	180.7	175.8	168.9	164.6	161.9

In the 2005-2012 timeframe, Danville had the highest cardiovascular disease death rate of the three locations. Although, it has been on a decline with an overall drop in death rate from 287.5 to 221.8[cxvi]. Following along in the same pattern as heart disease hospitalizations, Pittsylvania started out lower than the state, however as time moved on, the hospitalization rate continued to rise to levels much closer to

the state rate. For example, in 2005 the state rate was 206.1 and the Pittsylvania County rate was 155.3. By 2012, the difference in rates had decreased with the state's rate being 161.9 and Pittsylvania County's rate being 153.2[cxvii].

For both heart disease and cardiovascular disease, the City of Danville has the highest rates of hospitalization. However, when looking a healthcare costs, Pittsylvania County has a higher amount of total hospital charges. For heart disease, the total charges amounted to $25,635, 493 in the county compared to $21,701,097 for the city.

In 2015, heart disease was the nation's second leading cause of death. It was the leading cause of death in the City of Danville with a rate of 239.1. In Pittsylvania County, heart disease was the second leading cause of death in 2013[cxviii].



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	391.4	396.8	351.3	324.2	305.4	307.8	319.1	328.3
Pittsylvania	327.7	312.5	317.8	303.8	285.2	261.1	243.6	247.2
Virginia	263.24	254.97	245.99	238.20	229.07	226.68	217.97	214.21

The chart above shows the relationship in heart disease deaths by the three primary locations. The city of Danville has the highest overall death rates, followed Pittsylvania and then the state. While there has been fluctuation in the heart disease death rates for the city, it has been on the rise since 2010, where it has gone from a rate of 307.8 to 328.3 in 2012. For Pittsylvania County, heart disease death rates fell from 2005 to 2011, but rose in 2012.

Using six year rates from the Centers for Disease Control and Prevention, heart disease death rates were further examined based on location, race, and sex. The three tables below contain age-adjusted death rates for heart disease matching the ICD - 10 codes used by the Virginia Department of Health in determining the death rates used in the trend chart above. All race information in the following tables includes those of Hispanic or Latino origin or decent.

2010-2015 Heart Disease Death Rate Per 100,000 [cxix]						
	All Races[14] and Sexes		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	962	241.5	625	222.2	334	274.5
Pittsylvania	993	180.5	710	175.9	221	198.2
Virginia	81,676	159.2	64,003	155.8	16,229	194.1

Looking across all three localities, the City of Danville has the highest overall heart disease death rate for the 2010-2015 timeframe. Its rate of 241.5 is 1.52 times greater than that of the state's 159.2 death rate. For all localities, the death rate is higher for African Americans, with African Americans in Danville having the highest death rate among the race categories listed above. When dividing these results further by including sex, a difference in races between females and males in the region also becomes visible.

2010-2015 Female Heart Disease Death Rates [cxx]						
	Female All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	491	185.1	320	165	168	219.7
Pittsylvania	420	135.3	316	130.3	102	150.6
Virginia	39,018	127.8	30,525	124.3	7,862	157.3

Females in Danville have the highest overall (female) death rate of any of the three locations. When adding the lens of race and ethnicity, African American females in the City of Danville have the highest death rate of any location and race. The attached death rate of 219.7 is 1.33 times higher than that of White females in the city, 1.4 times greater than African American females at the state level and 1.46 times greater than African American females in Pittsylvania County. The biggest difference in death rate falls between African American females in the City of Danville and White females in Pittsylvania County where the death rate was roughly 1.7 times greater.

2010 -2015 Male Heart Disease Death Rates [cxxi]						
	Male All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	471	326.4	305	306.3	166	360.8
Pittsylvania	513	236.1	394	229.4	119	269.7
Virginia	42,658	199.5	33,478	195.5	8,367	245.2

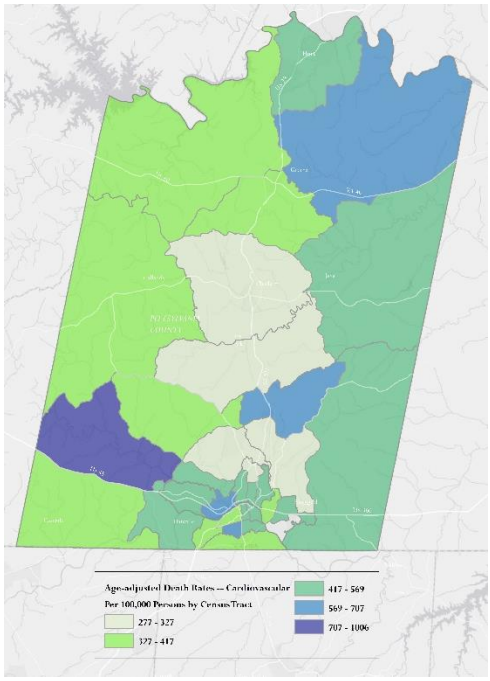
Males have a higher heart disease death rate than the females in the region. An example of this, is the difference between death rates in the City of Danville between men and women of all races, where the death rate for men is 1.76 times greater than the death for females. For the 2010-2015 timeframe, African American males had the highest heart disease death rate in the region. Their rate of 360.8 is

[14] All race information on this page includes those who are of Hispanic / Latino origin

almost 1.5 times greater than the state rate for African American males and 1.80 times greater than the all males state rate.

The high rates of incidence, hospitalizations and deaths supports the thoughts of the participants in the community engagement process. When asked in the community health survey 378 respondents voted for heart disease 131 times as a health issue impacting personal and family health. Later in the survey, 393 respondents voted for heart disease 121 times as a community health issue. When focus group attendees participated in the same voting exercise 57 participants voted 28 times heart disease as a top community health issue. When discussing the challenges around managing heart disease, the following themes emerged:

- Access to care, especially heart specific doctors in the counties
- Impacted by obesity and the barriers to healthy weight management
- Low levels of health literacy around heart health
- Often not thought about until after it is too late (after the heart attack)



Another viewpoint to study heart disease death rates in Pittsylvania – Danville is at the census tract level. The map to the right is a preview of the Age-Adjusted Cardiovascular Disease Rates per 100,000 by census tract for the City of Danville and Pittsylvania County. To see more, reference the 2017 Health Equity Report, page 19.

Hypertension Incidence, Hospitalization and Death Rates

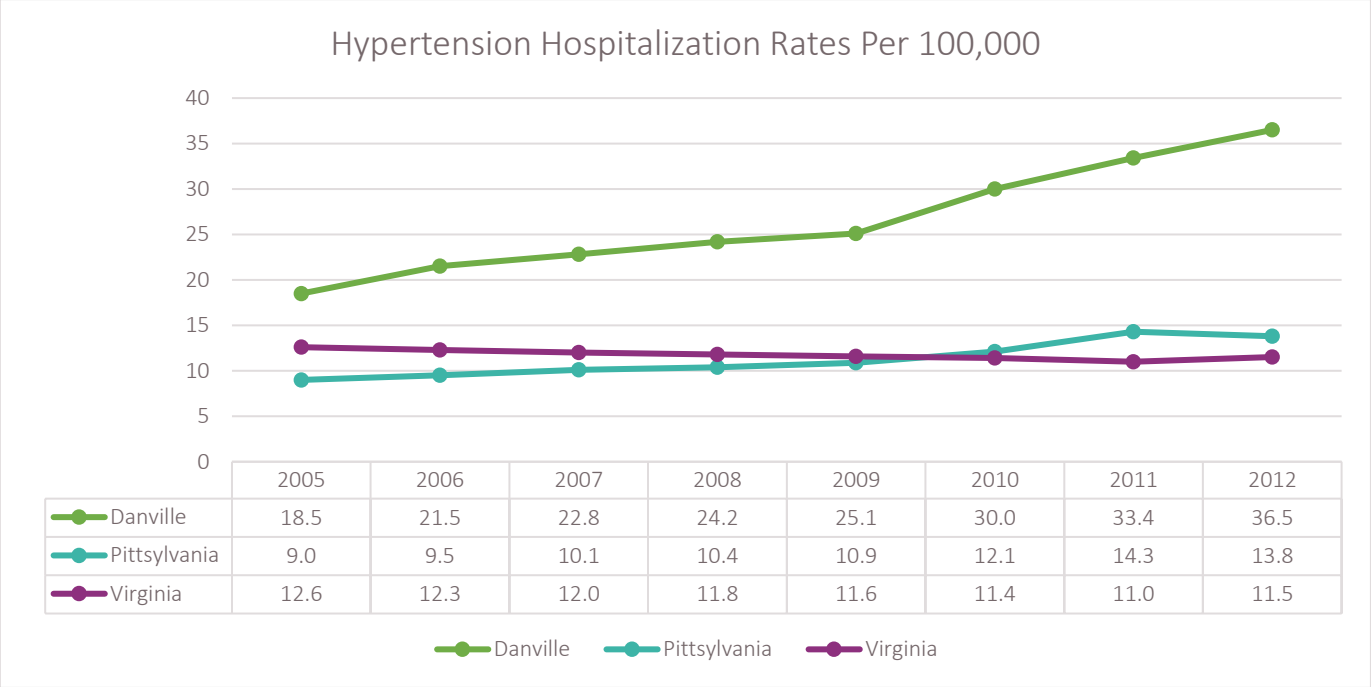
Hypertension, or high blood pressure "is a common and dangerous condition[cxxii]." Per the Centers for Disease Control and Prevention, high blood pressure is a risk factor for both heart disease and stroke. In 2016, it was estimated that 75 million people have high blood pressure, however only 54% have their blood pressure under control[cxxiii].

In 2011, 2013, and 2015, the Virginia BRFSS included questions to track the percentage of adults 18 or older who were told by a healthcare professional that they had high blood pressure, excluding those who only had high blood pressure during pregnancy[cxxiv].

	2011	2013	2015
Pittsylvania - Danville Health District	34.30%	42.60%	37.50%
Virginia	31.20%	32.50%	33.20%

In analyzing the three years' percentages, those belonging to the Pittsylvania – Danville Health District were higher than those of the state. Of the years included in the data, the 2013 percentage of 42.6% was the 6th highest rate at the health district level in the state[cxxv]. During the 2016 – 2017 Danville – Pittsylvania Community Health Survey, respondents were asked "have you ever been told by a healthcare professional that you have/ had any of the following conditions or health risks (check all that apply)?". Of the 396 respondents, 33.6% indicated that they had been diagnosed with high blood pressure.

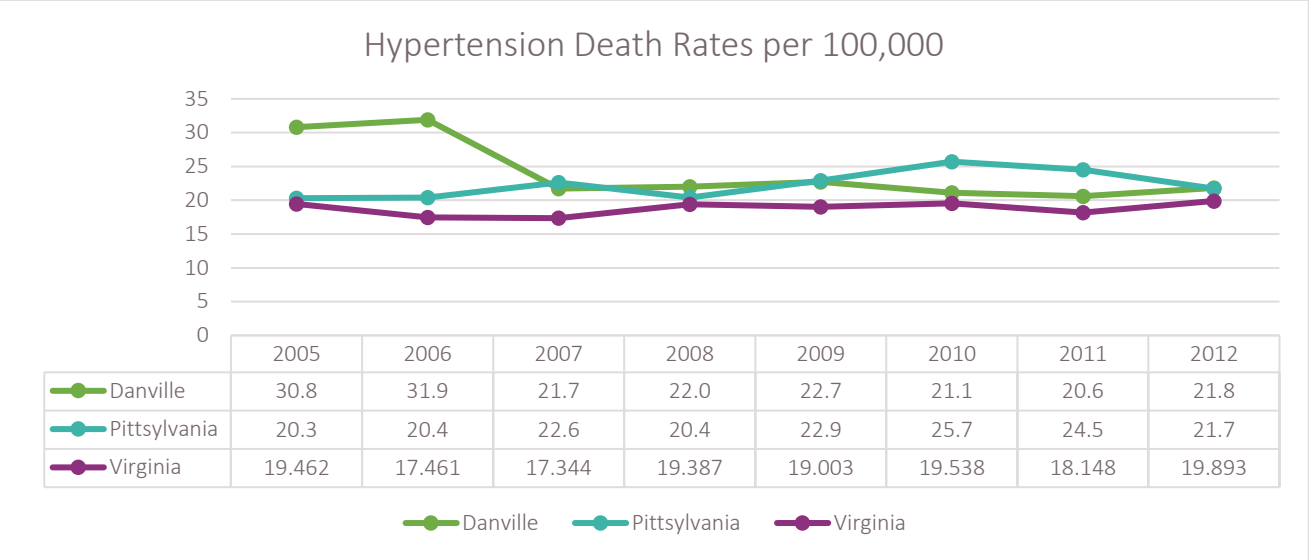
These higher rates of incidence, also resulted in higher hospitalization rates for hypertension. Using Virginia Department of Health data for 2005 through 2012, (three year rolling rate) to develop the chart below, the trend lines show that the City of Danville had higher hospitalization rates than either Pittsylvania County or the state.



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	18.5	21.5	22.8	24.2	25.1	30.0	33.4	36.5
Pittsylvania	9.0	9.5	10.1	10.4	10.9	12.1	14.3	13.8
Virginia	12.6	12.3	12.0	11.8	11.6	11.4	11.0	11.5

Since 2005, hospitalization rates per 100,000 have almost double in Danville rising from 18.5 to 36.5. Hospitalization rates in Pittsylvania County have also risen from 9.0 in 2005 to 13.8 in 2012. These

increases are amidst the overall decline in the Virginia hospitalization rate, which decreased from 12.6 in 2005 to 11.5 in 2012. In comparing 2012 data across locations, Danville's hospitalization rate is more than 3 times greater than the state's and 2.64 times greater than Pittsylvania County's rate[cxxvi]. These hospitalization rates led to total charges of $3,433,894 in Danville, and $2,440,705[15] in Pittsylvania County for 2012[cxxvii].



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	30.8	31.9	21.7	22.0	22.7	21.1	20.6	21.8
Pittsylvania	20.3	20.4	22.6	20.4	22.9	25.7	24.5	21.7
Virginia	19.462	17.461	17.344	19.387	19.003	19.538	18.148	19.893

Despite the much higher rates of hospitalization due to Hypertension, the death rates for that same period have declined for the City of Danville, and risen slightly for Pittsylvania County and the state. This resulted in the 2012 death rates being almost even across all three localities with Danville's death rate being 21.8, Pittsylvania's rate being 21.7 and the state's rate of 19.893[cxxviii].

Using six year rates from the Centers for Disease Control and Prevention, hypertension death rates were further examined based on location, race and sex. The three tables below contain age-adjusted death rates for hypertension matching the ICD - 10 codes used by the Virginia Department of Health in determining the death rates discussed above. All race information includes those of Hispanic or Latino origin or decent.

For this six-year timeframe, Danville had the highest hypertension death rate overall at 15.8 per 100,000. In looking through the lens of race, disparities between races becomes apparent. Overall African Americans in the Pittsylvania – Danville Health District have a higher death rate than Whites. For example, in the county the death rate for African Americans was 21.5 which was 1.4 times greater than the death rate for Whites in that same timeframe. The same is true for the city whose African American hypertension death rate (23.1) was 1.78 times greater than that of Whites (13.0).

[15]Total hospital charges is the sum of billed charges of all hospitalizations for a chronic disease indicator. Total charges do not reflect total cost of hospitalization or the total amount paid by the patient for hospitalization.

2010-2015 Hypertension Death Rates Per 100,000[cxxix]						
	All Races and Sexes		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	63	15.8	34	13	29	23.1
Pittsylvania	75	15.3	51	13.7	24	21.5
Virginia	7,448	14.5	5,059	12.3	2,232	26.7

2010-2015 Female Hypertension Death Rates per 100,000[cxxx]						
	Female All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	44	16.6	23	13.3	19	Unreliable[16]
Pittsylvania	36	12.1	28	11.9	Suppressed[17]	Suppressed
Virginia	4,112	13.3	2,852	11.5	1,179	23.5

2010-2015 Male Hypertension Death Rates per 100,000[cxxxi]						
	Male All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	19	Unreliable	Suppressed	Suppressed	10	Unreliable
Pittsylvania	39	19.3	23	15	16	Unreliable
Virginia	3,336	15.2	2,207	12.8	1,053	29.7

When breaking down the data through the framework of sex, general observations can be made based off the number of deaths between females and males. For example, more females died of hypertension than men in the health district. Furthermore, more of those females were residents of Danville. However, the comparison of rates across location, sex and race is complicated due to the number of data points that came back either suppressed or unreliable. Data is suppressed when the number of cases, or in this instance deaths is less than 10. In addition, rates are considered unreliable when the number of cases does not support a valid measurement, usually around 20 cases (deaths).

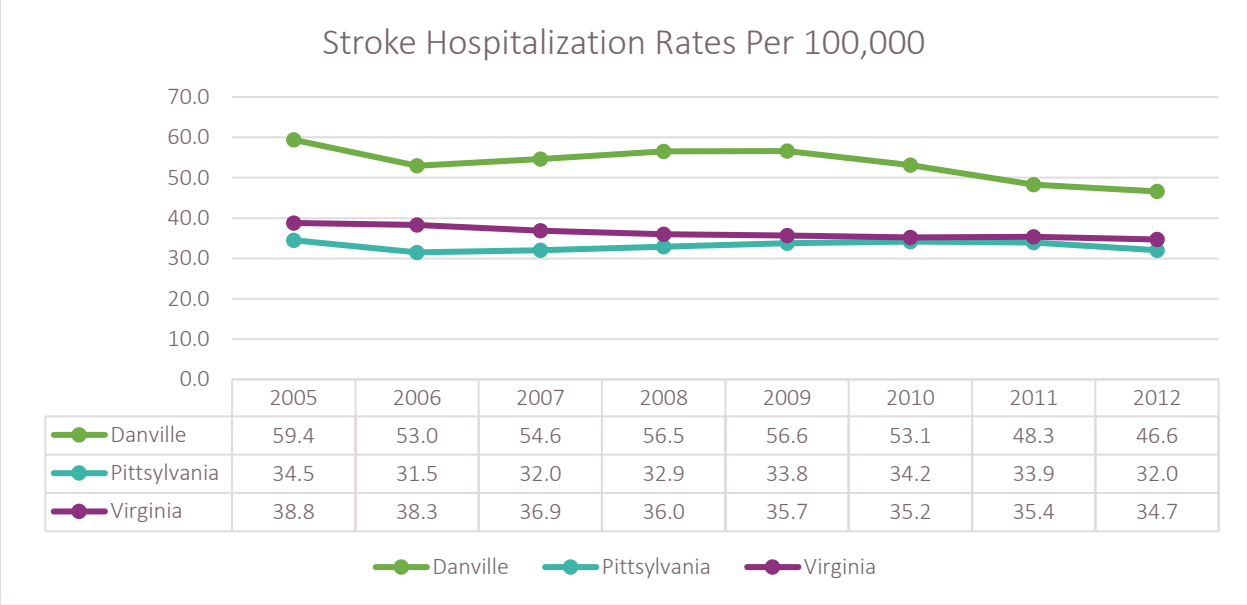
[16] Rate was unreliable due to the case number being lower than 20
[17] Data was suppressed as total case number being lower than 10

Cerebrovascular Incidence, Hospitalization and Death Rates

Cerebrovascular diseases are disorders where blood flow involving the brain is disrupted. These disorders include strokes, aneurysms, clots, embolisms and the narrowing or rupturing of blood vessels[cxxxii]. Using a more colloquial term, the Virginia Department of Health uses the term stroke to include cases of subarachnoid, intracerebral, and other types of hemorrhages, occlusion of cerebral arteries, transient cerebral ischemia and cerebrovascular diseases.

Using a 3-year rate (2012-2014) 2.9% of all respondents (statewide) of the BRFSS indicated they have had a stroke[18]. During this same timeframe 3.5% of respondents in the Pittsylvania – Danville Health District indicated they have had a stroke [cxxxiii]. On the Danville – Pittsylvania Community Health Survey, respondents were asked "have you ever been told by a healthcare professional that you have/ had any of the following conditions or health risks (check all that apply)?". Of the 396 respondents, 2% indicated that they had suffered a stroke.

Looking at hospitalization rates based on locality shows that Danville has higher rates of stoke (including other cerebrovascular attacks) hospitalizations than Pittsylvania County and the state. In 2005, the hospitalization rate for Danville was 59.4. This rate resulted in $4,241,898 in total hospital charges[19]. Since 2005, there has been a gradual overall decline in hospitalization rates through 2012. 2012 ended with a stroke hospitalization rate of 46.6, which resulted in $7,113,343 in total charges.



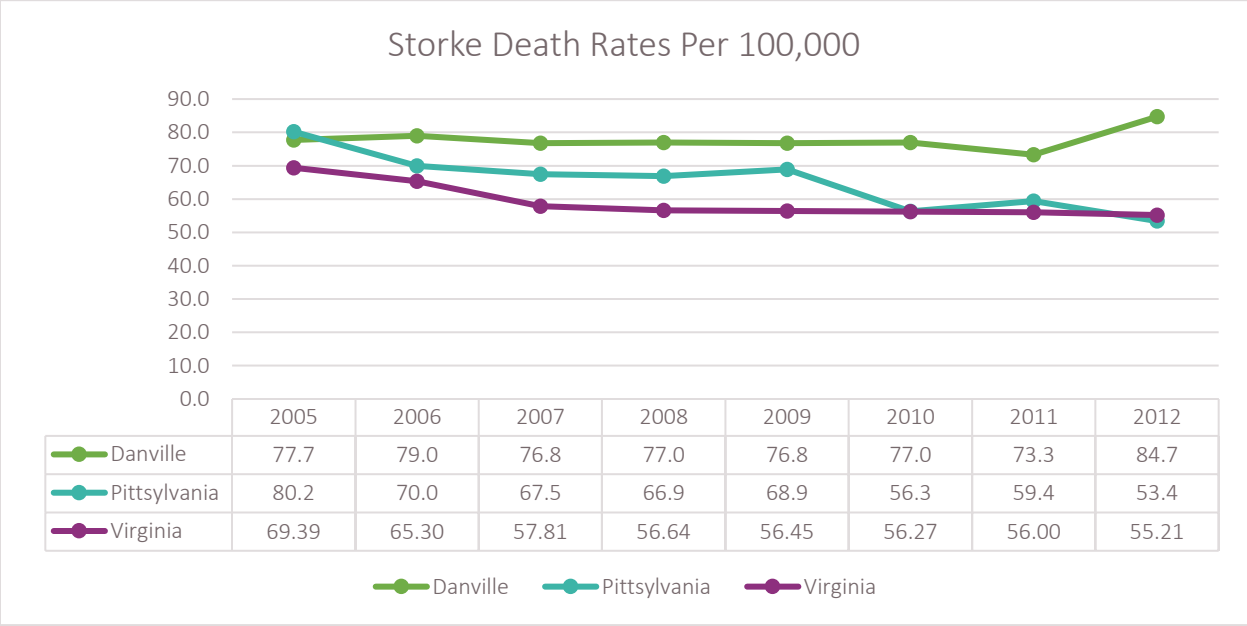
	2005	2006	2007	2008	2009	2010	2011	2012
Danville	59.4	53.0	54.6	56.5	56.6	53.1	48.3	46.6
Pittsylvania	34.5	31.5	32.0	32.9	33.8	34.2	33.9	32.0
Virginia	38.8	38.3	36.9	36.0	35.7	35.2	35.4	34.7

The stroke hospitalization rate for Pittsylvania County has been lower than the state rate for the 2005-2012 timeframe. There has been a general decline in hospitalization rates from 2005 at 34.5 to 2012 when the rate was 32.0. The 2012 hospitalization rate led to total billed charges of $5,404,531, making the total charges billed for the Pittsylvania – Danville Health District totaling more than $12.5 million in 2012[cxxxiv].

[18] In this instance stroke just means stroke and is not used to indicate other cerebrovascular attacks

[19] Total hospital charges are the sum of billed charges of all hospitalizations for a chronic disease indicator. Total charges do not reflect total cost of hospitalization or the total amount paid by the patient for hospitalization.

In addition to the hospitalization rates, the corresponding death rates for stroke during that same period also indicate that Danville generally has a higher death rate from stoke and other cerebrovascular attacks. This exception to this is in 2005 when the city's death rate was 77.7 to the county's 80.2. Overall, the city's death rates hovered around the mid- to high 70 range, before increasing to 84.7 in 2012[cxxxv]. In Pittsylvania County, the data shows a general decline in stroke deaths from its 80.2 rate in 2005 to 53.4 in 2012, when it dropped below the state's rate of 55.21[cxxxvi].



	2005	2006	2007	2008	2009	2010	2011	2012
Danville	77.7	79.0	76.8	77.0	76.8	77.0	73.3	84.7
Pittsylvania	80.2	70.0	67.5	66.9	68.9	56.3	59.4	53.4
Virginia	69.39	65.30	57.81	56.64	56.45	56.27	56.00	55.21

Using six year rates from the Centers for Disease Control and Prevention, stroke death rates were further examined based on location, race and sex. The three tables below contain age-adjusted death rates for stroke matching the ICD - 10 codes used by the Virginia Department of Health in determining the death rates. All race information in the following tables includes those of Hispanic or Latino origin or decent.

2010-2015 Stroke Deaths Per 100,000 (Age – Adjusted)[cxxxvii]						
	All Races and Sexes		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	243	61.8	153	53.3	90	72.5
Pittsylvania	214	41.9	155	39.1	59	52.9
Virginia	19,943	39.6	15,079	37.2	4,308	52.8

Across all races and sexes, the City of Danville has the highest stroke death rate. Its rate of 61.8 is 1.56 times greater that the state's rate of 39.6. When adding the additional framework of race, the city again has the highest death rates for both Whites and African Americans. The city's African American stroke death rate is 1.36 times higher than their White counterparts.

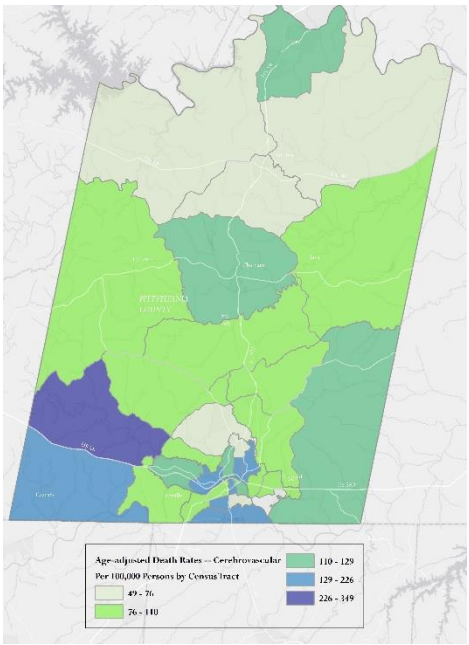
2010- 2015 Female Stroke Deaths Per 100,000 (Age-Adjusted) [cxxxviii]						
	Female All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	148	55.6	108	56.1	40	52
Pittsylvania	121	38.4	96	39.6	25	35.5
Virginia	11,787	38.8	9,103	37	2,374	48.2

Dividing the data again through the additional lens of sex provides further analysis of stroke deaths in the Pittsylvania – Danville Health District. Among females, Danville has the highest overall death rate. In additional White females have a higher rate of death due to stroke than their African American counterparts. This trend however, does not hold true at the state level, nor when looking at male death rates.

2010- 2015 Male Stroke Deaths per 100,000 (Age- Adjusted) [cxxxix]						
	Male All Races		White		Black or African American	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Danville	95	66.6	45	46.2	50	98
Pittsylvania	93	46.3	59	38.4	34	76.9
Virginia	8,156	33.7	5,976	36.6	1,934	58.2

The City of Danville had the highest overall male death rate which was 1.98 times greater than the state's stroke death rate for males. In addition, the death rate for African American males in the city was 2.12 times greater than that of White males. It is also 1.68 times greater than the African American male death rate at the state level.

Another viewpoint to study stroke (Cerebrovascular disease) death rates in Pittsylvania – Danville is to look at the census tract level. The map to the right is a preview of the Age-Adjusted Cerebrovascular Disease Death Rates per 100,000 by census tract for the City of Danville and Pittsylvania County. To see more, reference the 2017 Health Equity Report, page 20.



Chronic Disease Conclusion

The Pittsylvania – Danville Health District experiences high rates of chronic disease incidences, hospitalizations and deaths. When breaking down the health district in to two separate entities, the City of Danville experiences higher rates than Pittsylvania County. The rates belonging to the city were all higher than the state rate, expect for arthritis hospitalizations.

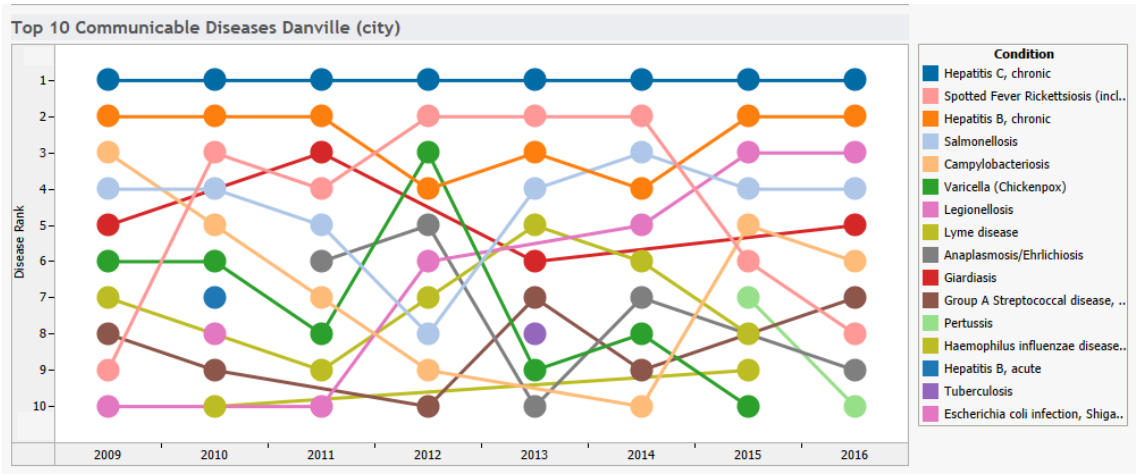
The chronic diseases discussed above share common risk factors, such as obesity, tobacco use, poor diet, and lack of physical activity. With 75% of residents being overweight or obese, only 29.1 % of residents meeting physical activity guidelines and only 7% of residents meeting nutrition guidelines on fruit and vegetable consumption, health outcomes around chronic diseases are supported by current health behaviors.

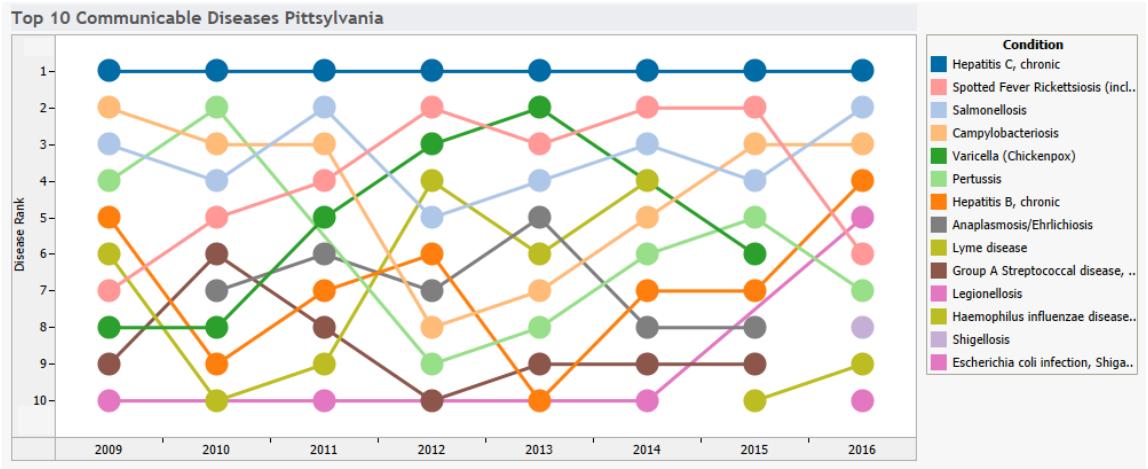
In addition to health behaviors and their impact on health outcomes, attention must also be paid to the remaining factors that influence health. To see how socio-economic, clinical care and built environment impact the remaining 70% of the production of health, review the 2017 Dan River Region Health Equity Report. This supplemental map-book will highlight the system and built environment level challenges that create barriers to participating in healthy behaviors.

Communicable Diseases

"Communicable diseases are illnesses that spread from one person to another or from an animal to a person.[cxl]" There are several ways disease can be spread, for example, through contact with a contagious/ infected individual, through the air, through contact with body fluids, touching a contaminated surface or object, and through insect or other animal bites[cxli].

The two charts below, provided through the Virginia Department of Health's data portal, show the top ten communicable diseases (excluding sexually transmitted infections and HIV) by year from 2009 and 2016 for both the City and Pittsylvania County (since these top ten diseases change yearly, there are more than 10 communicable diseases listed under conditions). On the following page, you will find the top ten communication disease by locality for 2016. The remainder of this section will be exploring the conditions and their impact on health in the Pittsylvania – Danville Health District[20].





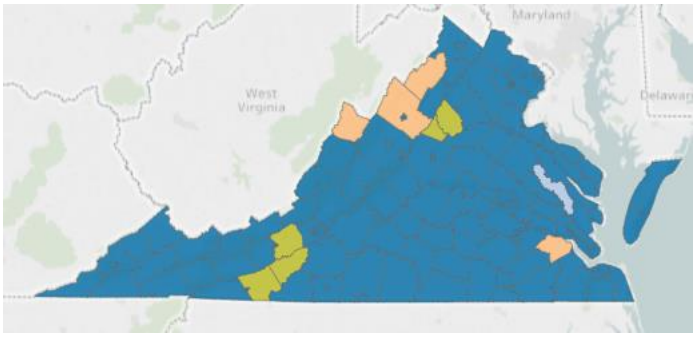
[20] Rates are based off the number of cases reported to the health department

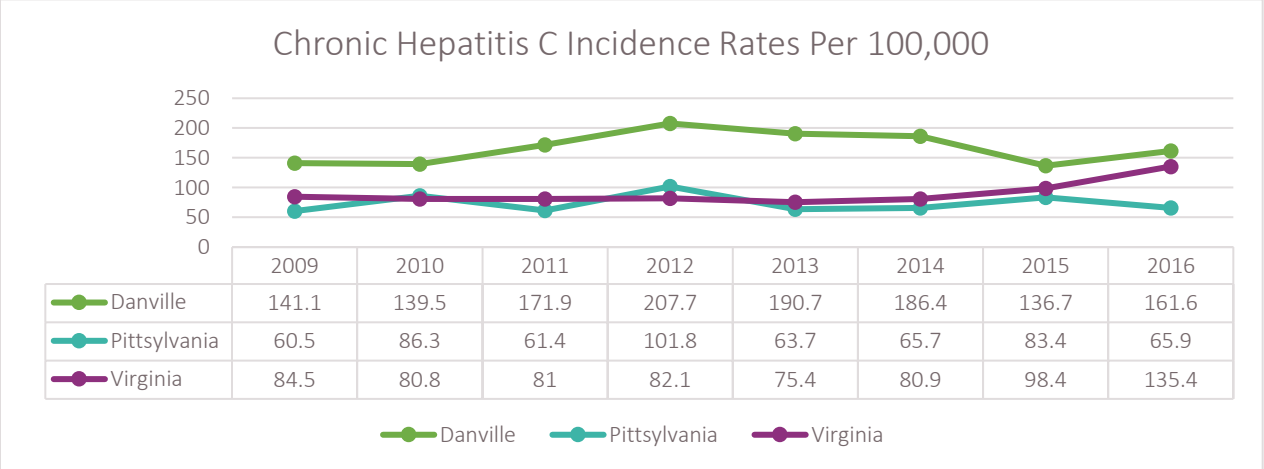
Pittsylvania 2016 Top 10 Communicable Diseases	Danville 2016 Top 10 Communicable Diseases
Hepatitis C, Chronic	Hepatitis C, Chronic
Salmonellosis	Hepatitis B, Chronic
Campylobacteriosis	Legionellosis
Hepatitis B, Chronic	Salmonellosis
Legionellosis	Giardiasis
Spotted Fever Rickettsiosis	Campylobacteriosis
Pertussis	Group A Streptococcall Disease
Shigellosis	Spotted Fever Rickettsiosis
Haemophilus Influenzae	Analpasmosis/ Ehrlichiosis
E. Coli	Pertussis

Chronic Hepatitis C

Hepatitis C is a liver infection that is spread through blood. As such, "most people become infected with the Hepatitis C virus by sharing needles or other equipment to inject drugs.[cxlii]" For some, 25% - 30% Hepatitis C is short-term illness. However, for 70% - 85% Hepatitis C is a long-term, chronic infection. Most people with chronic Hepatitis C are asymptomatic, and are at risk for serval long-term health outcomes such as developing a chronic liver infection, cirrhosis of the liver, and liver cancer[cxliii].

In the Pittsylvania – Danville Health District, Hepatitis C was the most common communicable disease for both Danville (61 cases) and Pittsylvania County (41 cases). Not only is chronic Hepatitis C the leading communicable disease in the region, it is also the leading communicable disease throughout most of Virginia, as depicted in the map provided by the Virginia Department of Health.





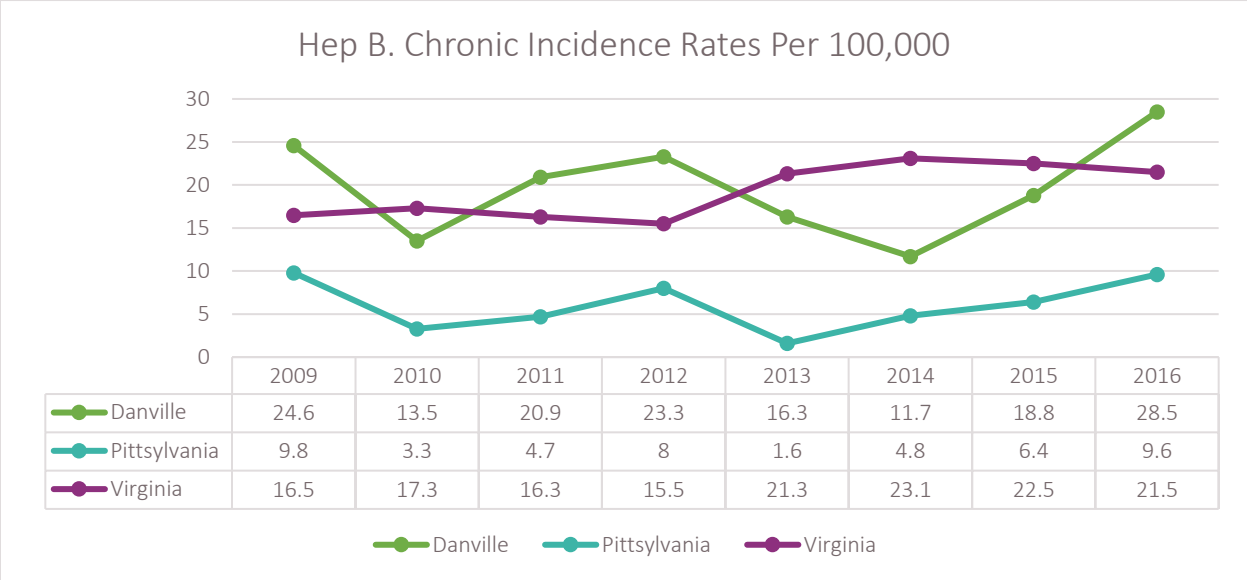
Chronic Hepatitis C has been the leading communicable disease in Danville and Pittsylvania County since 2009. The City of Danville has the highest incidence rates. Though the rates fluctuate throughout the years, the City of Danville has seen a general increase since 2009 when the incidence rate was 141.1 to

2016 when the incidence rate was calculated to be 161.6. Within the 2009-2016 timeframe, chronic Hepatitis C incidence rates peaked in the city in 2012 when the rate hit 207.7, which was 2.53 times greater than the state rate. Pittsylvania County incidence rates have been closer to the state's rates. Even though there was a slight increase from 2009 (60.5) to 2016 (65.9), the incidence rate for the county fell below the state rate in 2013 and remained there through 2016[cxliv].

Chronic Hepatitis B

"Hepatitis B is a liver infection caused by the Hepatitis B virus (HBV)"[cxlv]. HBV is transferred through bodily fluids and can occur through sexual contact, sharing needles or other drug injection equipment, and from mother to baby during birth. Like Hepatitis C, HBV can lead to cirrhosis and liver cancer. However, unlike Hepatitis C, there is a vaccination available.

For the state of Virginia, Chronic Hepatitis B was the second leading communicable disease[21]. It was also the second leading communicable disease in Danville (12 cases) and the fourth in Pittsylvania County (6 cases). The trend chart below reflects higher incidence rates in Danville[cxlvi]. Over the past eight years, Chronic Hepatitis B rates in Danville have been significantly higher than that of Pittsylvania County. In 2009 Danville's rate was 2.5 times greater than Pittsylvania County's. The largest difference in Hepatitis B rates between Danville and Pittsylvania County occurred in 2013, when Danville's rate of 16.3 was 10.19 times greater than the county's. In terms of general Hepatitis B trends, both Danville and Pittsylvania County have seen periods of increase and decrease in incidence rates. For the City of Danville, rates have been increasing since 2014, whereas Pittsylvania County's incidence rate has been increasing since 2013[cxlvii].



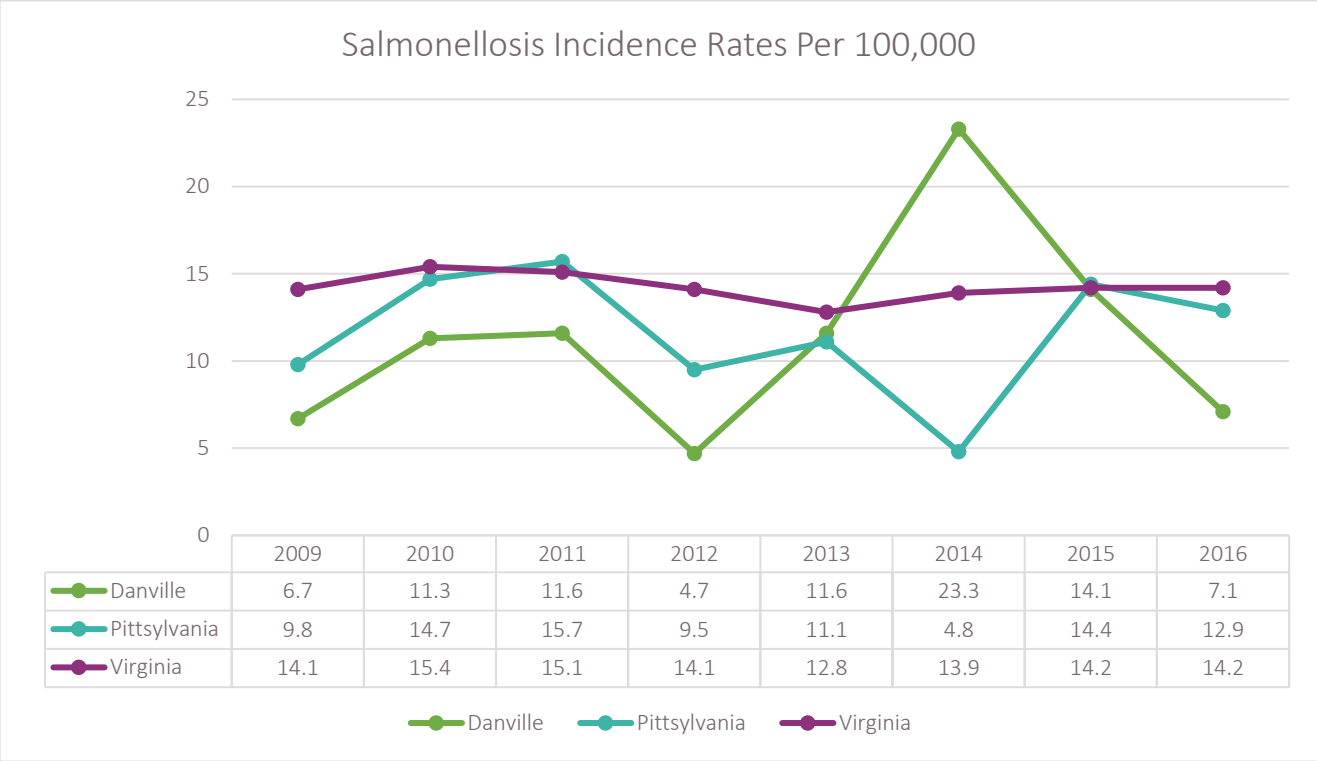
	2009	2010	2011	2012	2013	2014	2015	2016
Danville	24.6	13.5	20.9	23.3	16.3	11.7	18.8	28.5
Pittsylvania	9.8	3.3	4.7	8	1.6	4.8	6.4	9.6
Virginia	16.5	17.3	16.3	15.5	21.3	23.1	22.5	21.5

Salmonellosis

Salmonellosis is the illness associated with Salmonella, "a bacteria that makes people sick[cxlviii]." It is estimated that Salmonella causes one million foodborne illnesses annually[cxlix]. "When two or more

[21] Excluding Sexually Transmitted Infections and HIV

people get the same illness from the same contaminated food or drink, the event is called a foodborne disease outbreak. Similarly, when two or more people get the same illness from contact with the same animal or animal environment, the event is called a zoonotic outbreak.[cl]" During 2016, the United States experienced Salmonellosis as both a foodborne illness outbreak and zoonotic outbreak. High risk populations for Salmonella infection include young children (especially those under 5 years of age, older adults and those with weakened immune systems[cli]. In Pittsylvania County, Salmonellosis was the second highest communicable disease[22], with 8 cases occurring during 2016. It was also the fourth leading communicable disease for the City of Danville with 4 cases and ranked third overall in the state with 1,931 cases[clii]. In the trend chart above, both Danville and Pittsylvania county generally have lower rates of Salmonellosis than the state. One exception is 2014, when Danville's incidence rate was 23.3 compared to Pittsylvania's rate of 4.8 and the state's rate of 13.9.



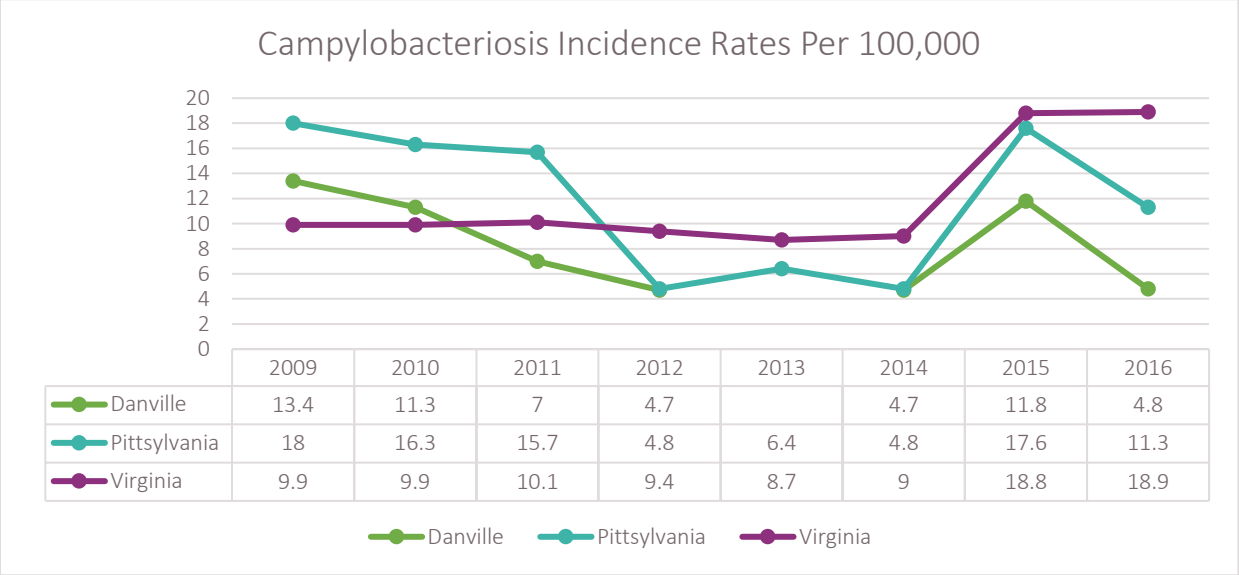
	2009	2010	2011	2012	2013	2014	2015	2016
Danville	6.7	11.3	11.6	4.7	11.6	23.3	14.1	7.1
Pittsylvania	9.8	14.7	15.7	9.5	11.1	4.8	14.4	12.9
Virginia	14.1	15.4	15.1	14.1	12.8	13.9	14.2	14.2

[22] Excluding Sexually Transmitted Infections and HIV

Campylobacteriosis

"Campylobacteriosis is an infectious disease caused by bacteria of the genus *Camplyobacter.*[cliii]" Of the diarrheal illnesses in the United States, Campylobacter is one of the most common. It is estimated to impact over 1.3 million people in each year. Most of these cases are not a part of an outbreak, but are isolated events.

In 2016, Campylobacteriosis was the third leading communicable disease[23] in Pittsylvania with 7 cases. It was also the sixth leading communicable disease in the City of Danville with 2 cases. Furthermore, it ranked fifth in incidence rates at the state level with 1,578 cases.[cliv]



	2009	2010	2011	2012	2013	2014	2015	2016
Danville	13.4	11.3	7	4.7		4.7	11.8	4.8
Pittsylvania	18	16.3	15.7	4.8	6.4	4.8	17.6	11.3
Virginia	9.9	9.9	10.1	9.4	8.7	9	18.8	18.9

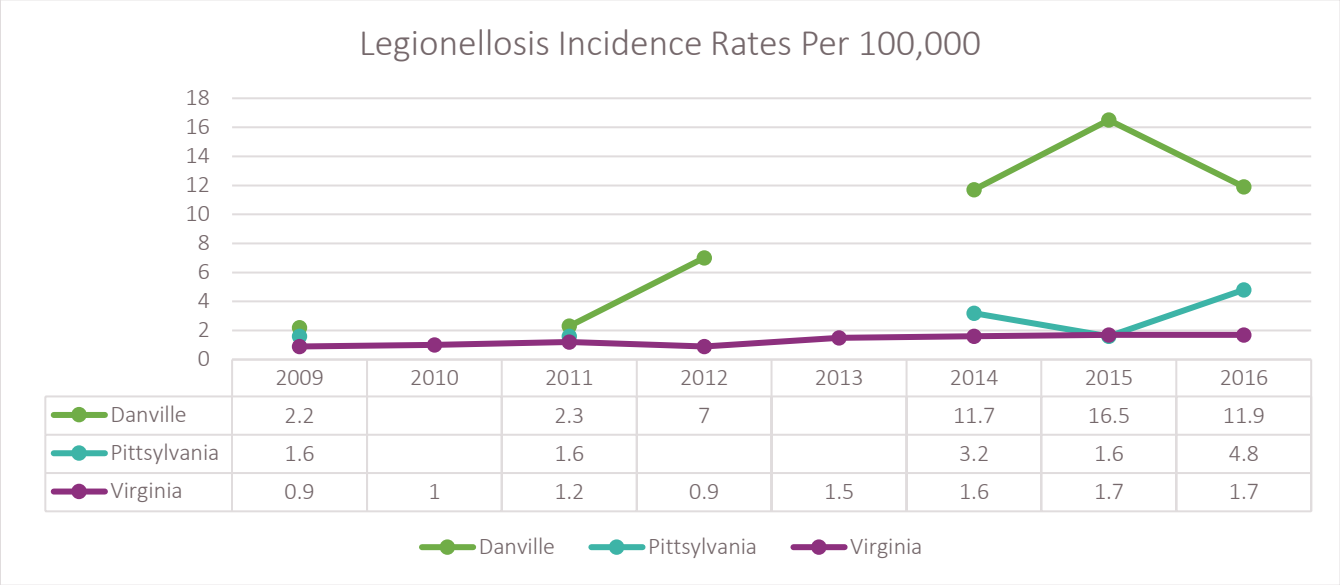
The trend chart above shows sporadic incidence rates across all three localities. For the City of Danville its highest incidence rate occurred in 2009 with a rate of 13.4. Its lowest rate occurred in 2013 when no cases were reported to the health department. For Pittsylvania County, its highest incidence rate occurred in 2015 with a rate of 17.6. Its lowest rate corresponds to 2012 and 2014 when the incidence rates were 4.8 per 100,000. 2012 was the first time that the incidence rates for Danville and Pittsylvania fell below the state's rate. This trend continued through 2016[clv].

[23] Excluding Sexually Transmitted Infections and HIV

Legionellosis

Legionellosis is the collective name for Legionnaires' disease and Pontiac Fever. Legionellosis is transferred through breathing in "small droplets of water in the air that contain Legionella[clvi]". Since it is rarely spread from person to person, a key defense in reducing Legionellosis incidence rates is keeping the Legionella bacteria from entering water systems.

Legionellosis was the third most common communicable disease[24] in Danville for 2016 with 5 cases. It was also the fifth leading communicable disease in Pittsylvania County with 3 cases. For the state, Legionellosis was not in the top ten communicable diseases for 2016. [clvii]



	2009	2010	2011	2012	2013	2014	2015	2016
Danville	2.2		2.3	7		11.7	16.5	11.9
Pittsylvania	1.6		1.6			3.2	1.6	4.8
Virginia	0.9	1	1.2	0.9	1.5	1.6	1.7	1.7

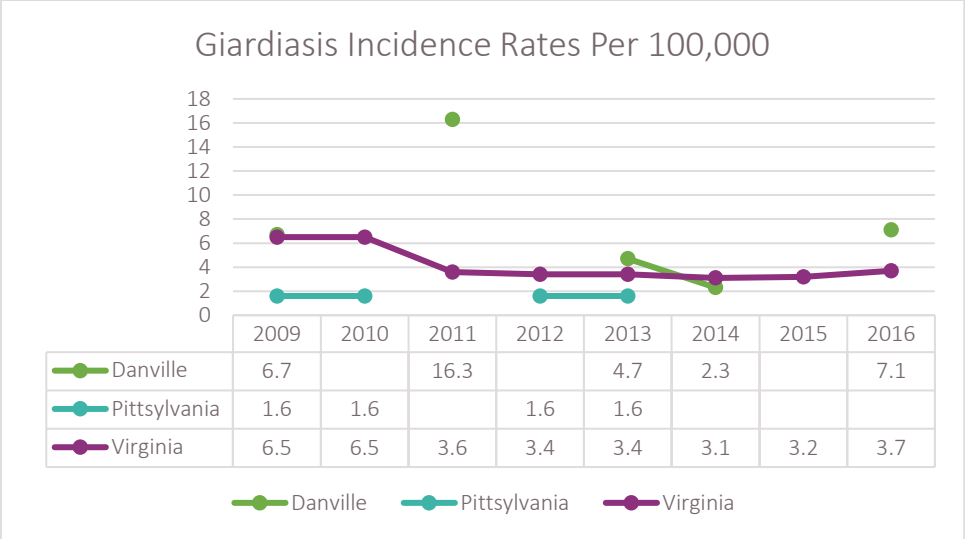
The Legionellosis incidence rate chart above shows the trend of infections within Danville, Pittsylvania County and the state. The breaks in the line for Danville and the county represent years in which no cases of Legionellosis were reported to the health department. The highest incidence rates came from the City of Danville over the 2014 to 2016 timeframe. During these three years, the city experienced five cases in 2014, seven cases in 2015 and five cases in 2016. The case numbers resulted in incidence rates that were 7.3, 9.7 and 7 times greater than the state's incidence rates[clviii].

[24] Excluding Sexually Transmitted Infections and HIV

Giardiasis

Giardiasis is a diarrheal illness caused by Giardia, a microscopic parasite. The most common source of transmission is through water, including both drinking and recreational water sources[clix]. Populations and settings, which have an increased risk of Giardiasis include children at child care settings, backpackers, hikers and campers, and in recreational waters including pools, lakes, springs, rivers and ponds.

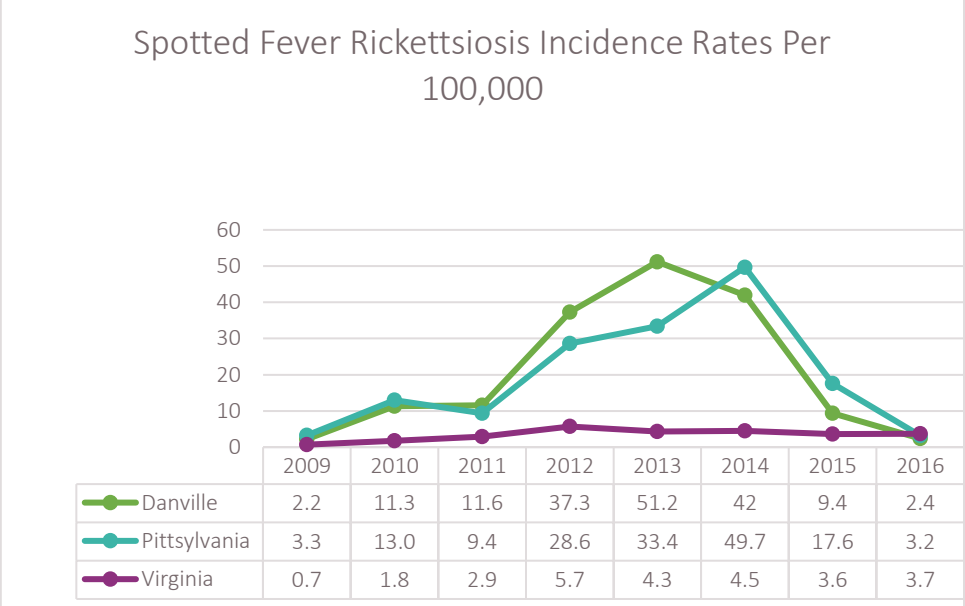
In 2016, Giardiasis was the fifth leading communicable disease for the City of Danville with three cases. There were no cases in Pittsylvania County and 313 in the state. The trend chart below shows the various incidence rates for Giardiasis over the past eight years. Both Danville and Pittsylvania County have years where no cases have been reported to the health department.



	2009	2010	2011	2012	2013	2014	2015	2016
Danville	6.7		16.3		4.7	2.3		7.1
Pittsylvania	1.6	1.6		1.6	1.6			
Virginia	6.5	6.5	3.6	3.4	3.4	3.1	3.2	3.7

Spotted Fever Rickettsiosis

"Spotted fever group rickettsioses (spotted fevers) are a group of diseases caused by closely related bacteria.[clx]" This disease group includes Rocky Mountain Spotted Fever, which is the most serious and common Spotted Fever Rickettsiosis in the United States.



	2009	2010	2011	2012	2013	2014	2015	2016
Danville	2.2	11.3	11.6	37.3	51.2	42	9.4	2.4
Pittsylvania	3.3	13.0	9.4	28.6	33.4	49.7	17.6	3.2
Virginia	0.7	1.8	2.9	5.7	4.3	4.5	3.6	3.7

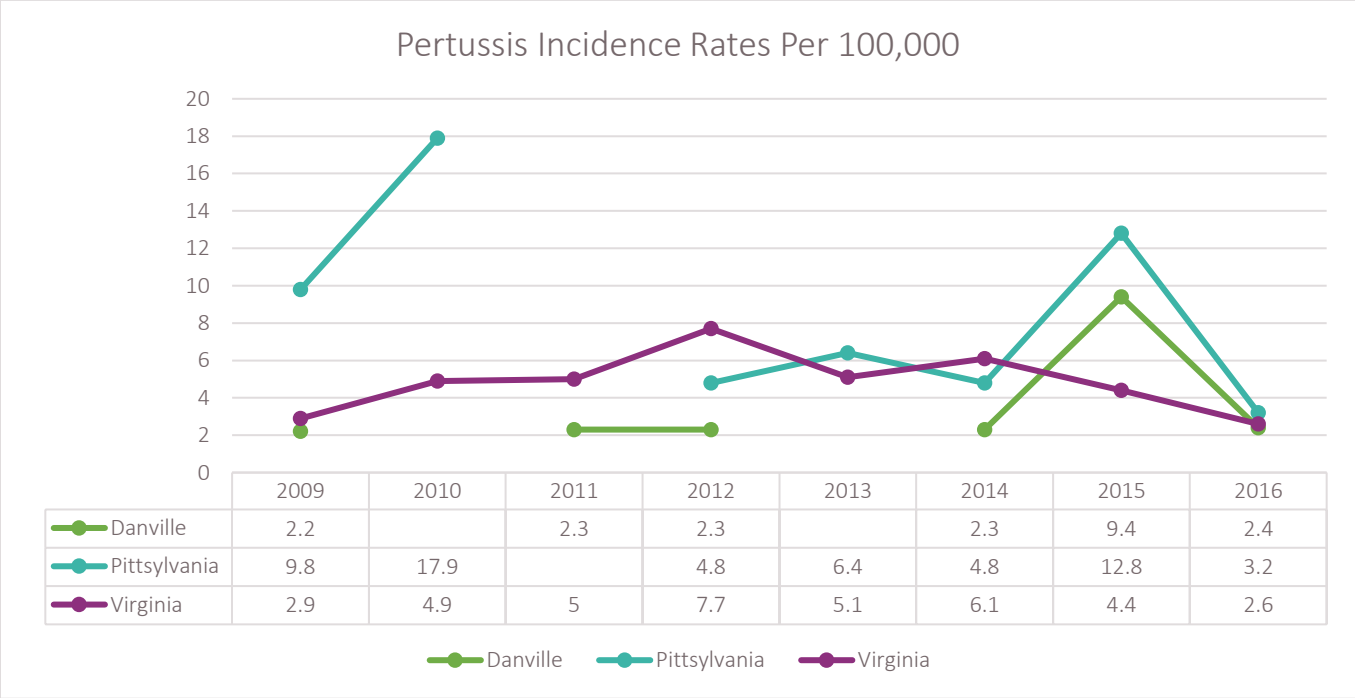
In Pittsylvania County, Spotted Fever Rickettsiosis was the sixth leading communicable disease with 2 cases. Danville, also saw 2 cases in 2016, making it the 8th leading communicable disease for the city. During the same year, the state saw 312 cases. Looking at the trend chart, both Danville and Pittsylvania County tend to have a higher incidence rate than the state. Over the 8-year timeframe from 2009 to 2016, Danville's incidence rate peaked in 2013 when it saw 22 cases. Pittsylvania County's rates peaked the following year when 31 cases were reported to the health department.

Pertussis

"Pertussis, also known as whooping cough, is a highly contagious respiratory disease[clxi]." It is characterized by violent coughing, which reduces the ability to breathe. While Pertussis can impact people of all ages, it is especially dangerous for those under one year of age. Vaccination is the best way to prevent Pertussis. Vaccines and boosters are available for all ages.

Pertussis was the seventh leading communicable disease[25] for Pittsylvania County (2 cases) and the tenth for the City of Danville (1 case) in 2016. Pertussis was not among the state's leading top ten communicable diseases for 2016. However, 369 cases were reported statewide[clxii].

When Pittsylvania County has had incidences of Pertussis it has primarily been at rates higher than both Danville and the state. Using the 2009 – 2016 incidence rate chart below, Pittsylvania County saw its highest incidence rate of Pertussis in 2010 when 11 cases were reported to the health department. Danville experienced its peak incidence rate in 2015 with 4 cases[clxiii].



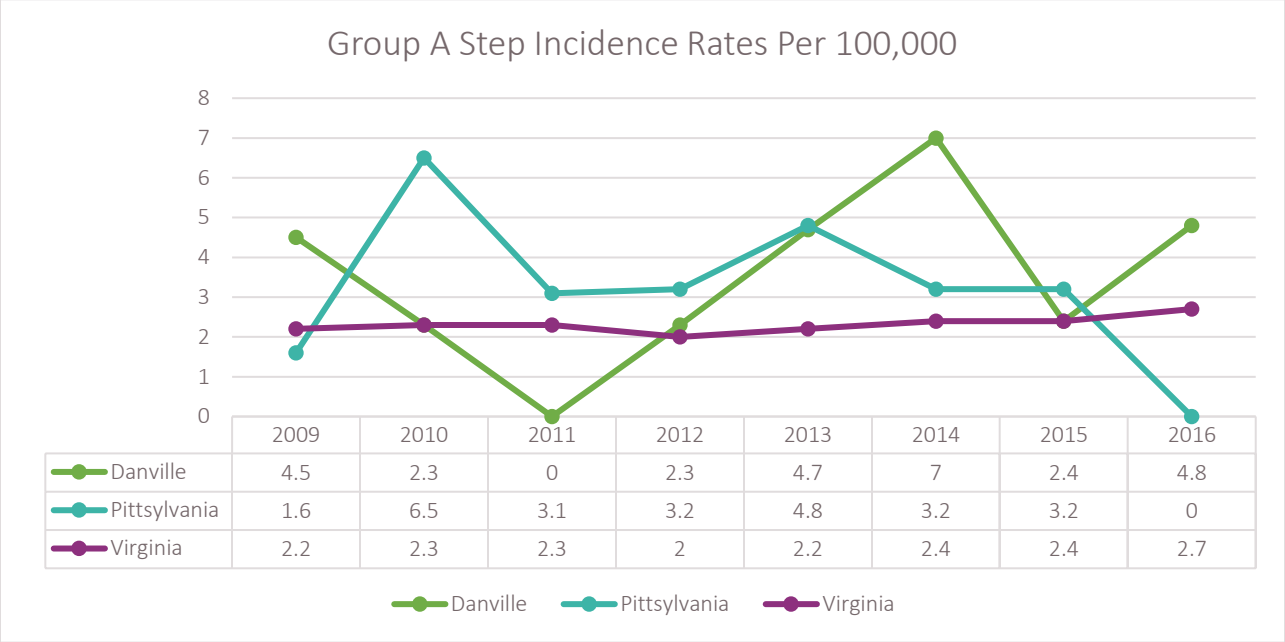
	2009	2010	2011	2012	2013	2014	2015	2016
Danville	2.2		2.3	2.3		2.3	9.4	2.4
Pittsylvania	9.8	17.9		4.8	6.4	4.8	12.8	3.2
Virginia	2.9	4.9	5	7.7	5.1	6.1	4.4	2.6

[25] Excludes Sexually Transmitted Infection and HIV

Group A Strep

"Group A Streptococcus (group A Strep) is a type of bacterium that can cause many different infections that range from minor illnesses to very serious and deadly diseases.[clxiv]" Three of the diseases associated with group A Strep include Strep Throat, Scarlet Fever, and Impetigo. As the bacteria live in the nose and throat, group A Strep's transmission occurs through small water droplets called respiratory droplets[clxv].

Group A Strep was the seventh leading communicable diseases[26] in Danville for 2016 with 2 cases reported to the health department. The City's highest incidence rate from 2009 to 2016 occurred in 2014 with a rate of 7 per 100,000, or 3 cases[clxvi]. Pittsylvania County did not have any Group A Strep cases reported to the health department in 2016. The County's highest incidence rate occurred in 2010 with a rate of 6.5, per 100,000, or 4 cases.



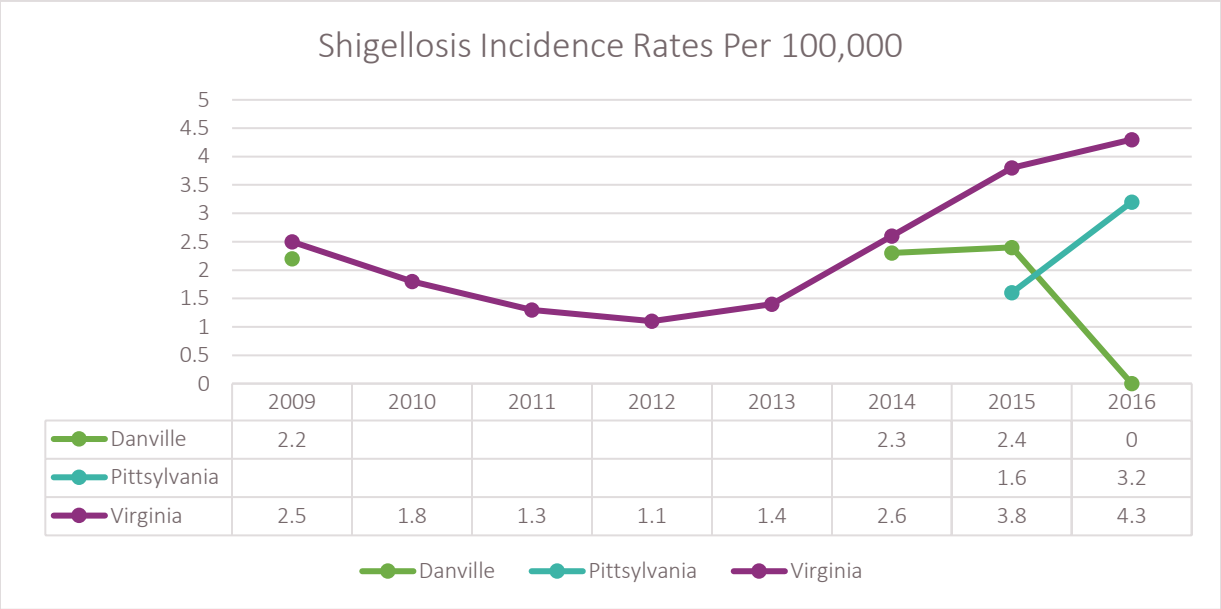
	2009	2010	2011	2012	2013	2014	2015	2016
Danville	4.5	2.3	0	2.3	4.7	7	2.4	4.8
Pittsylvania	1.6	6.5	3.1	3.2	4.8	3.2	3.2	0
Virginia	2.2	2.3	2.3	2	2.2	2.4	2.4	2.7

[26] Excluding Sexually Transmitted Diseases and HIV

Shigellosis

Shigellosis is an infectious disease caused by a group of bacteria called Shigella.[clxvii]" Annually, Shigella causes half a million cases of diarrhea in the United States. While Shigellosis can affect anyone, those under the age of five are mostly likely to contract the disease[clxviii]. To stop the spread of Shigella, practice frequent handwashing with soap in addition to taking other hygiene measures[clxix].

Shigellosis was the eighth leading communicable disease for Pittsylvania County in 2016 with two cases[clxx]. However, Shigellosis incidences that are reported to the Pittsylvania – Danville Health Department are sporadic. In 2009 the City of Danville had one case. Another case was not reported to the health department until 2014. The city also had one case that was reported in 2015. During the 2009 to 2016 timeframe Pittsylvania County did not have its first reported case until 2015, when it had one case. In 2016, the County had its highest reported incidence rate of 3.2 with two cases[clxxi].

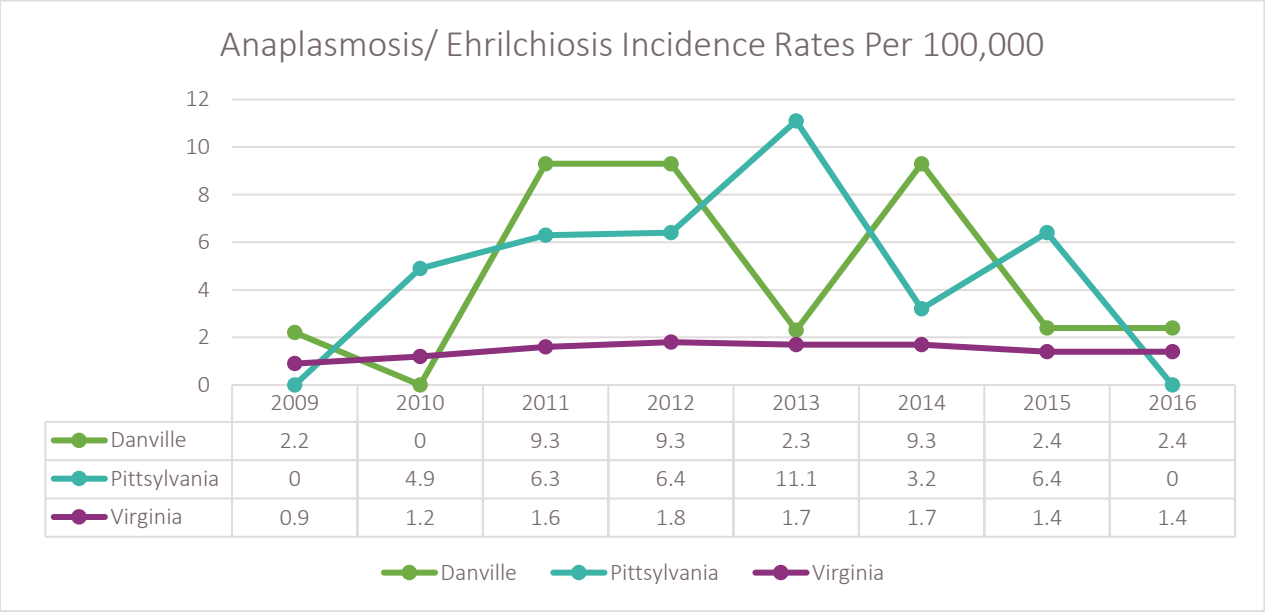


	2009	2010	2011	2012	2013	2014	2015	2016
Danville	2.2					2.3	2.4	0
Pittsylvania							1.6	3.2
Virginia	2.5	1.8	1.3	1.1	1.4	2.6	3.8	4.3

Anaplasmosis/ Ehrilchiosis

"Anaplasmosis is a disease caused by the bacterium Anaplasma phagocutophilium. This pathogen is transmitted to humans by the bite of an infected tick." Related to Anaplasmosis is Ehrilchiosis, which "is the general name used to describe several bacterial diseases that affect animals and humans"[clxxii]. The populations most at risk include males, and people over the age of 40. Those who have compromised or suppressed immune systems also have a higher risk of contracting the disease[clxxiii].

Anaplasmosis/ Ehrilchiosis is the ninth leading communicable disease[27] with one case in the City of Danville. It did not make the top ten list for the county or the state in 2016. However, 114 were reported throughout the state[clxxiv]. The number of cases and their related incidence rates vary over the past nine years. In 2009 and in 2016, the City of Danville had one reported case while the County had zero. The highest incidence rates for the city were recorded in 2011,2012,2014 which all saw rates of 9.3 or 4 cases. In the county, the highest incidence rate was recorded in 2013 with a rate of 11.1, or 7 cases.



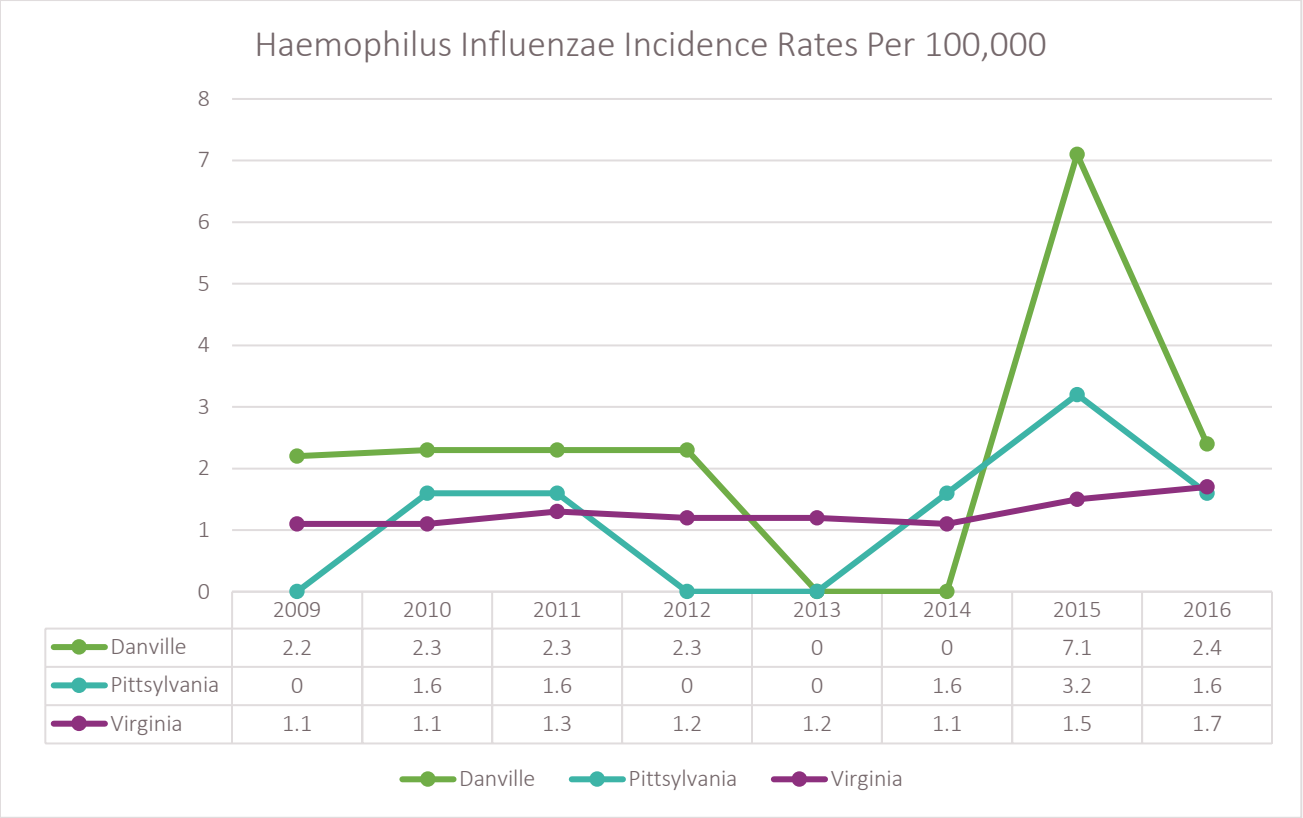
	2009	2010	2011	2012	2013	2014	2015	2016
Danville	2.2	0	9.3	9.3	2.3	9.3	2.4	2.4
Pittsylvania	0	4.9	6.3	6.4	11.1	3.2	6.4	0
Virginia	0.9	1.2	1.6	1.8	1.7	1.7	1.4	1.4

[27] Excluding Sexually Transmitted Infection and HIV

Haemophilus Influenzae

"Haemphlus Influenzae is a type of bacteria that mainly causes illness in babies and young children.[clxxv]" It is spread from person to person by either direct contact or through respiratory droplets[clxxvi].

Haemophilus Influenzae is the 9th leading communicable disease[28] for Pittsylvania County with an incidence rate of 1.6 or one reported case. Like with Shigellosis, incidence rates are sporadic and low with generally no more than one case. In the timeframe charted below the City of Danville saw its highest incidence rate in 2015 with a 7.1 per 100,000 score, or 3 cases. Pittsylvania County also saw its highest incidence rate in 2015 with a rate of 3.2 per 100,000 or 2 cases[clxxvii].



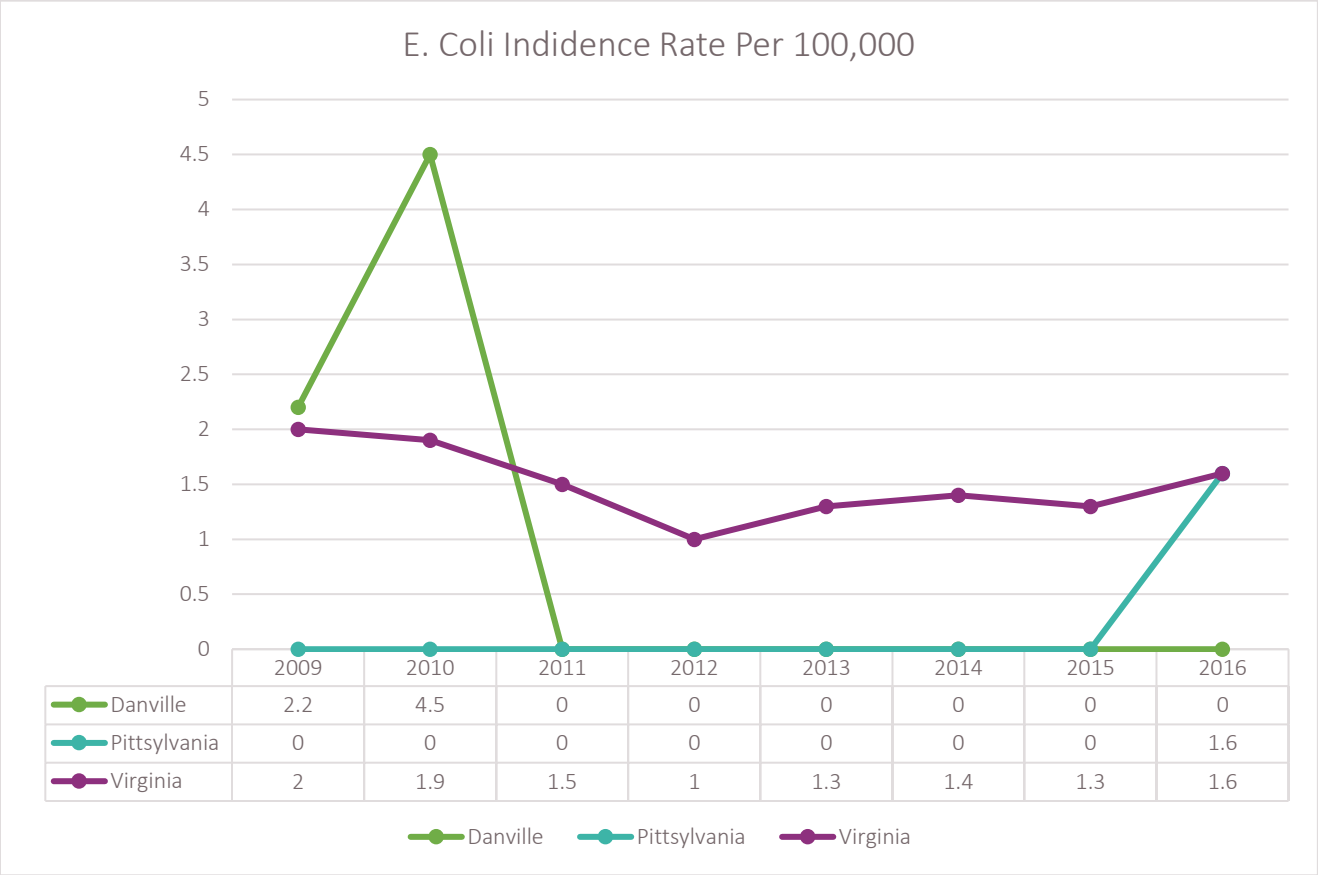
	2009	2010	2011	2012	2013	2014	2015	2016
Danville	2.2	2.3	2.3	2.3	0	0	7.1	2.4
Pittsylvania	0	1.6	1.6	0	0	1.6	3.2	1.6
Virginia	1.1	1.1	1.3	1.2	1.2	1.1	1.5	1.7

[28] Excluding Sexually Transmitted Infections and HIV

Escherichia coli

"Escherichia coli, more commonly known as E. coli are bacteria found in the environment, foods and intestines of people and animals.[clxxviii]" It is a large and diverse group of bacteria with strains that are harmless and others that can make people ill. These illnesses can take the shape of diarrhea, urinary tract infections, respiratory illness, and bloodstream infections[clxxix].

E. Coli was the 10th leading communicable disease in Pittsylvania in 2016, with one reported case. Over the eight years charted below, this was the first case reported to the health department for Pittsylvania County. Furthermore, the City of Danville has not had a reported case since 2010 when it recorded two cases[clxxx].



	2009	2010	2011	2012	2013	2014	2015	2016
Danville	2.2	4.5	0	0	0	0	0	0
Pittsylvania	0	0	0	0	0	0	0	1.6
Virginia	2	1.9	1.5	1	1.3	1.4	1.3	1.6

Communicable Diseases Conclusion

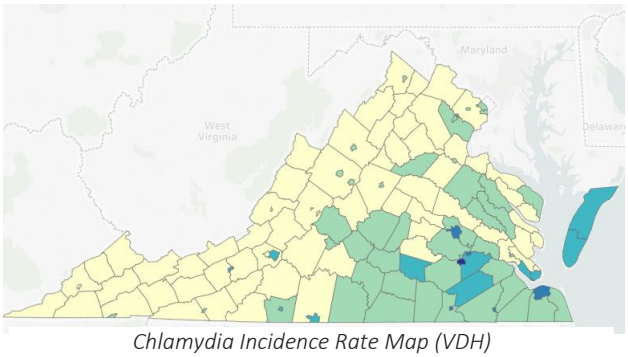
Of the communicable diseases section, Chronic Hepatitis C, Chronic Hepatitis B, Salmonellosis, Spotted Fever Rickettsiosis and Campylobacteriosis are the few diseases that have consistent reports on incidence rates, where it might be possible to discern a general trend. The most prevalent communicable diseases, excluding sexually transmitted infections and HIV, was Chronic Hepatitis C. In 2016 alone there were more than 100 Chronic Hepatitis C cases recorded for the Pittsylvania – Danville Health District. Incidence rates for Chronic Hepatitis C were significantly higher than others listed. For example, in the City of Danville the incidence rate for Hepatitis C is 5.7 times greater than Chronic Hepatitis B rates. The same is true for Pittsylvania County. In addition to the differences in hepatitis viruses, the city's Hepatitis C incidence rate in 2016 was 22.8 times greater than the city's Salmonellosis incidence rate. The county's rate was 5.1 times greater.

Sexually Transmitted Infections

"Sexually transmitted infections (STIs) are infections that are common/ have a high probability of being spread from person to person through sexual contact.[clxxxi]" Other names for sexually transmitted infections include, sexually transmitted diseases and venereal diseases. Annually, the Centers for Disease control and Prevention estimates that there are 20 million new sexually transmitted infections. Among those who are at higher risk for STIs include adolescents and young adults; gay, bisexual and other men who have sex with men, and some racial and ethnic minority groups that experience higher rates of incidence[clxxxii]. Through the Virginia Department of Health Data Portal, incidence rate data for the 2006 to 2015 timeframe was analyzed for trends in Chlamydia, Gonorrhea, HIV/ AIDS, and Total Early Syphilis rates.

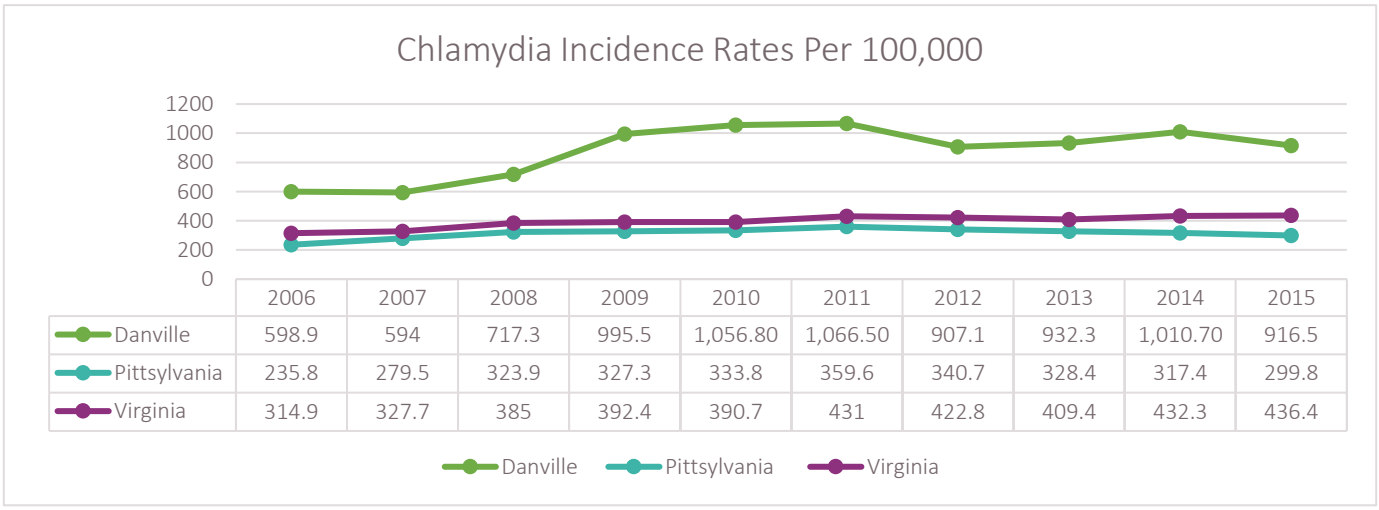
Chlamydia

"Chlamydia is a common sexually transmitted disease (STD) cause by infection with Chlamydia trachomatis". In 2015, the Centers for Disease Control and Prevention recorded 1,526,658 cases. However, the CDC also estimates that 2.68 million infections occur annually. Most of which occur among adolescents and young adults aged 15 to 24[clxxxiii].



Chlamydia Incidence Rate Map (VDH)

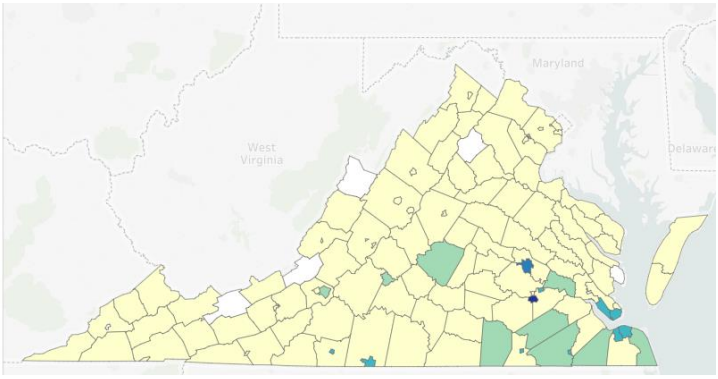
In 2015, the overall Chlamydia incidence rate for the state was 436.4. per 100,000 with a total case number of 36,340[clxxxiv]. Furthermore, Chlamydia was the most common sexually transmitted infection of the four tracked infections since 2006. This same trend is seen in the Pittsylvania – Danville Health District. In looking at the trend data, Danville had higher incidence rates of Chlamydia than the state or Pittsylvania County. In 2015, Danville had the ninth highest Chlamydia in the rate in the state, with a rate that was 2.1 times greater than the state's rate and 3.05 times greater than Pittsylvania County. In the dates included in this chart, both Danville and Pittsylvania County reached its highest incidence rates in 2011. Danville ranked ninth among those with the highest infection rates. Danville's 2011 rate was 2.47 times higher than the state rate and 2.97 times higher than Pittsylvania County. Throughout all ten years, each jurisdiction saw an increase in Chlamydia incidence rates[clxxxv].



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Danville	598.9	594	717.3	995.5	1,056.80	1,066.50	907.1	932.3	1,010.70	916.5
Pittsylvania	235.8	279.5	323.9	327.3	333.8	359.6	340.7	328.4	317.4	299.8
Virginia	314.9	327.7	385	392.4	390.7	431	422.8	409.4	432.3	436.4

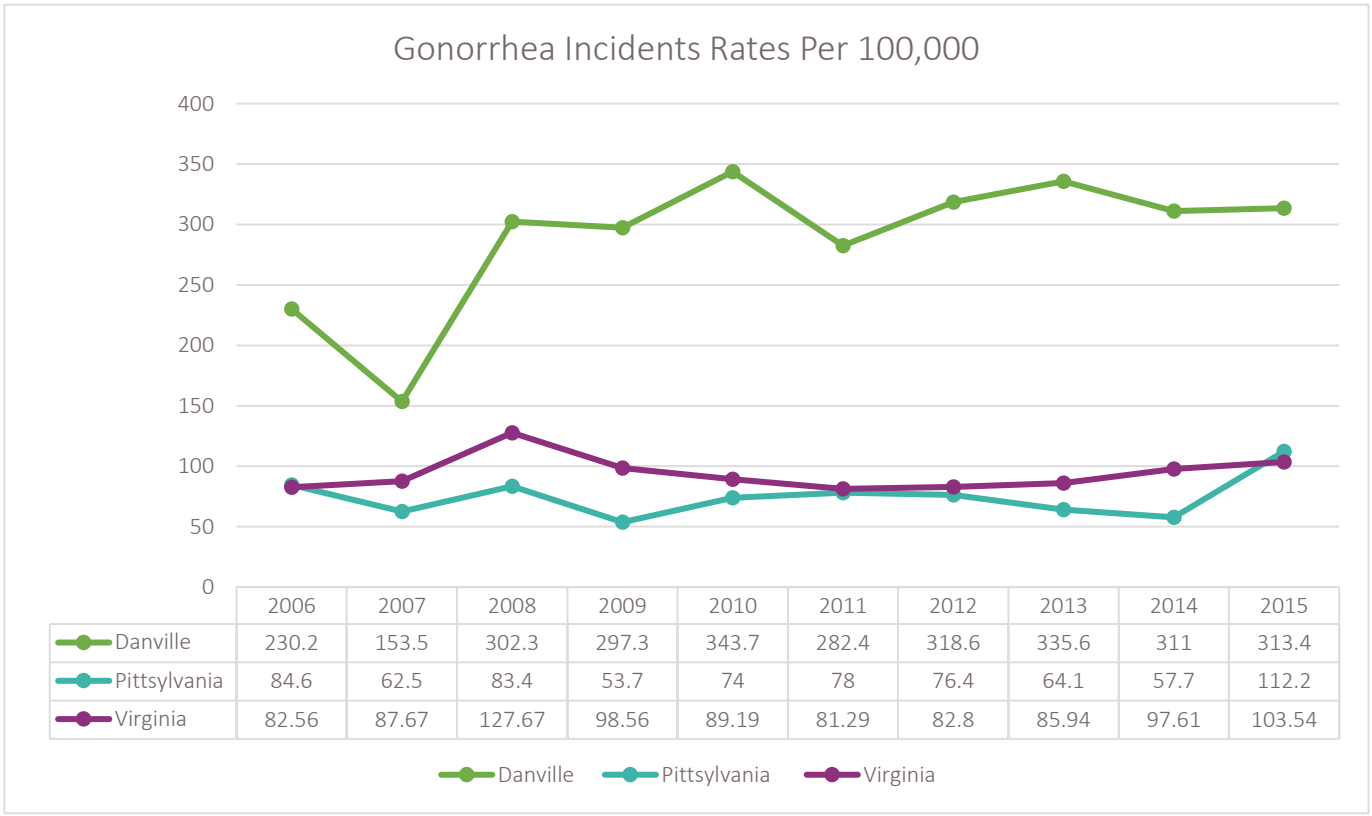
Gonorrhea

"Gonorrhea is a sexually transmitted disease (STD) cause by infection with the Neisseria gonorrhoeae bacterium", which infects mucous membranes[clxxxvi]. Gonorrhea is a common STD, with the Centers for Disease Control estimating 820,000 new cases annually. Furthermore, the CDC also estimates that more than half of the annual cases occur among adolescents and young adults aged 15-24[clxxxvii].



Gonorrhea Incidence Rate Map (VDH)

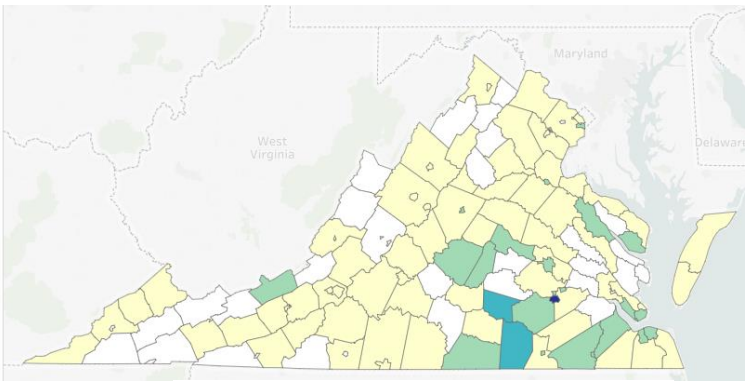
In 2015, there were 8,621 reported cases of Gonorrhea in Virginia, leading to an incidence rate of 103.5 per 100,000[clxxxviii]. Per the Gonorrhea rates trend data graphed below, the City of Danville had the highest Gonorrhea rates between the city, the county and the state. In 2015, Danville's Gonorrhea rate was 313.4 which was the 11th highest in the state. Danville's rate was 3.02 times greater than the state rate and 2.8 times greater than the rate for Pittsylvania County. In addition, Danville ranked among top ten locations with the highest Gonorrhea rates in 2008 (10th), 2009 (7th), 2010 (5th) 2011 (6th), 2012 (3rd), 2013 (4th) and in 2014 (6th)[clxxxix]. Furthermore, in the 10 years of rate data, the city and county both have seen an overall increase in incidence rates.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Danville	230.2	153.5	302.3	297.3	343.7	282.4	318.6	335.6	311	313.4
Pittsylvania	84.6	62.5	83.4	53.7	74	78	76.4	64.1	57.7	112.2
Virginia	82.56	87.67	127.67	98.56	89.19	81.29	82.8	85.94	97.61	103.54

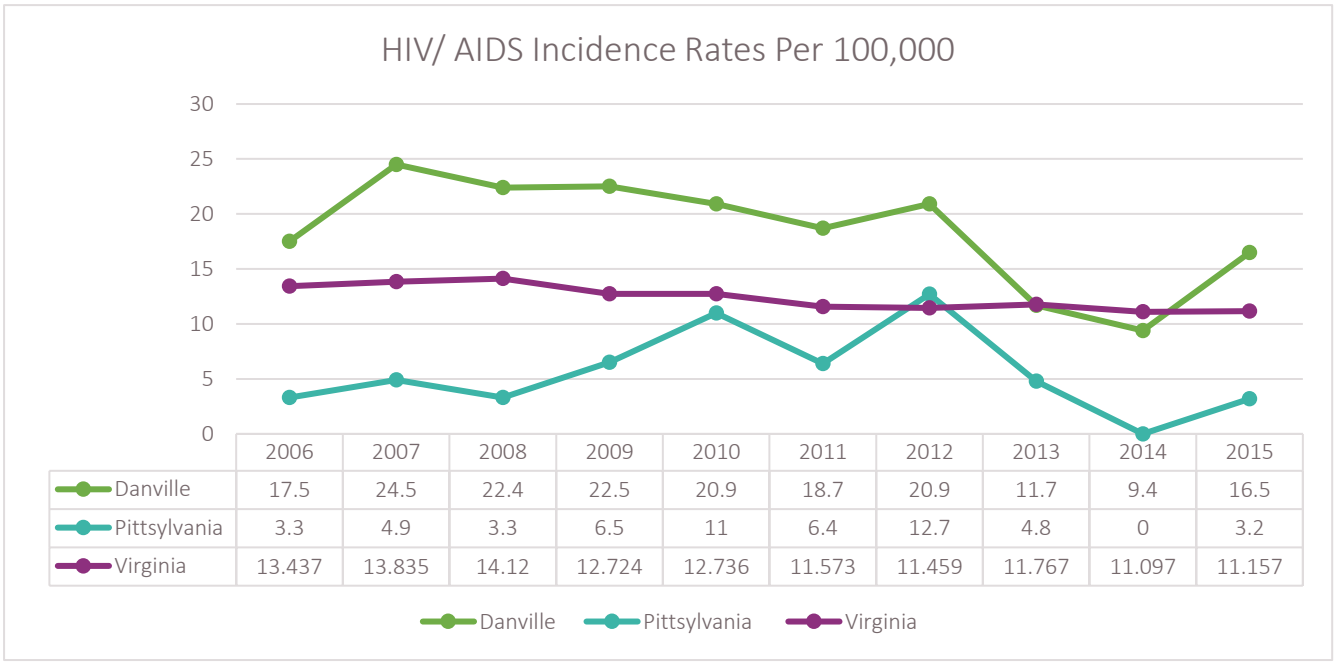
Human Immunodeficiency Virus (HIV) / Acquired Immunodeficiency Syndrome (AIDS)

"HIV stands for human immunodeficiency virus. It is a virus that can lead to acquired immunodeficiency syndrome or AIDS if not treated. Unlike some other viruses, the human body can't get rid of HIV completely, even with treatment[cxc]." HIV can be transmitted through sharing needles to inject drugs, from mother to baby during pregnancy, birth, or breastfeeding and through sexual contact[cxci].



HIV/ AIDS Incidence Rate Map (VDH)

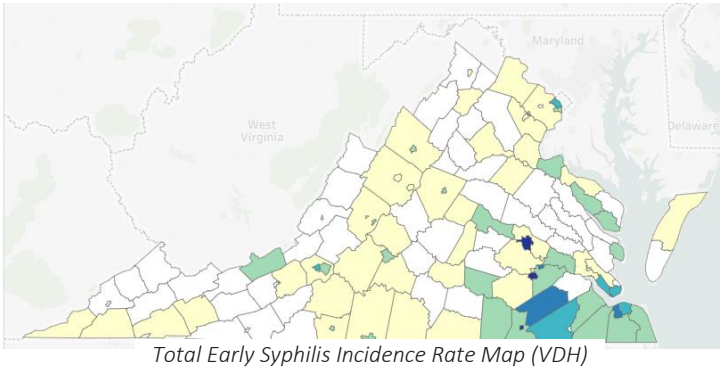
In 2014, it was estimated by the Centers for Disease Control and Prevention that the United States saw 37,600 new HIV Infections. In 2014, the state of Virginia saw 924 new cases for an HIV rate of 11.1 per 100,000[cxcii]. This rate increased slightly in 2015 to 11.2 per 100,000 with 929 new cases. In the trend chart below, Danville generally has the highest HIV/AIDS infection rate out of the city, the county and the state. In 2013 and 2014, Danville's rate dropped below the state's rate. However, in the two prior years, 2011 and 2012, Danville had the 11th highest HIV/AIDS Incidence rate in the state.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Danville	17.5	24.5	22.4	22.5	20.9	18.7	20.9	11.7	9.4	16.5
Pittsylvania	3.3	4.9	3.3	6.5	11	6.4	12.7	4.8	0	3.2
Virginia	13.437	13.835	14.12	12.724	12.736	11.573	11.459	11.767	11.097	11.157

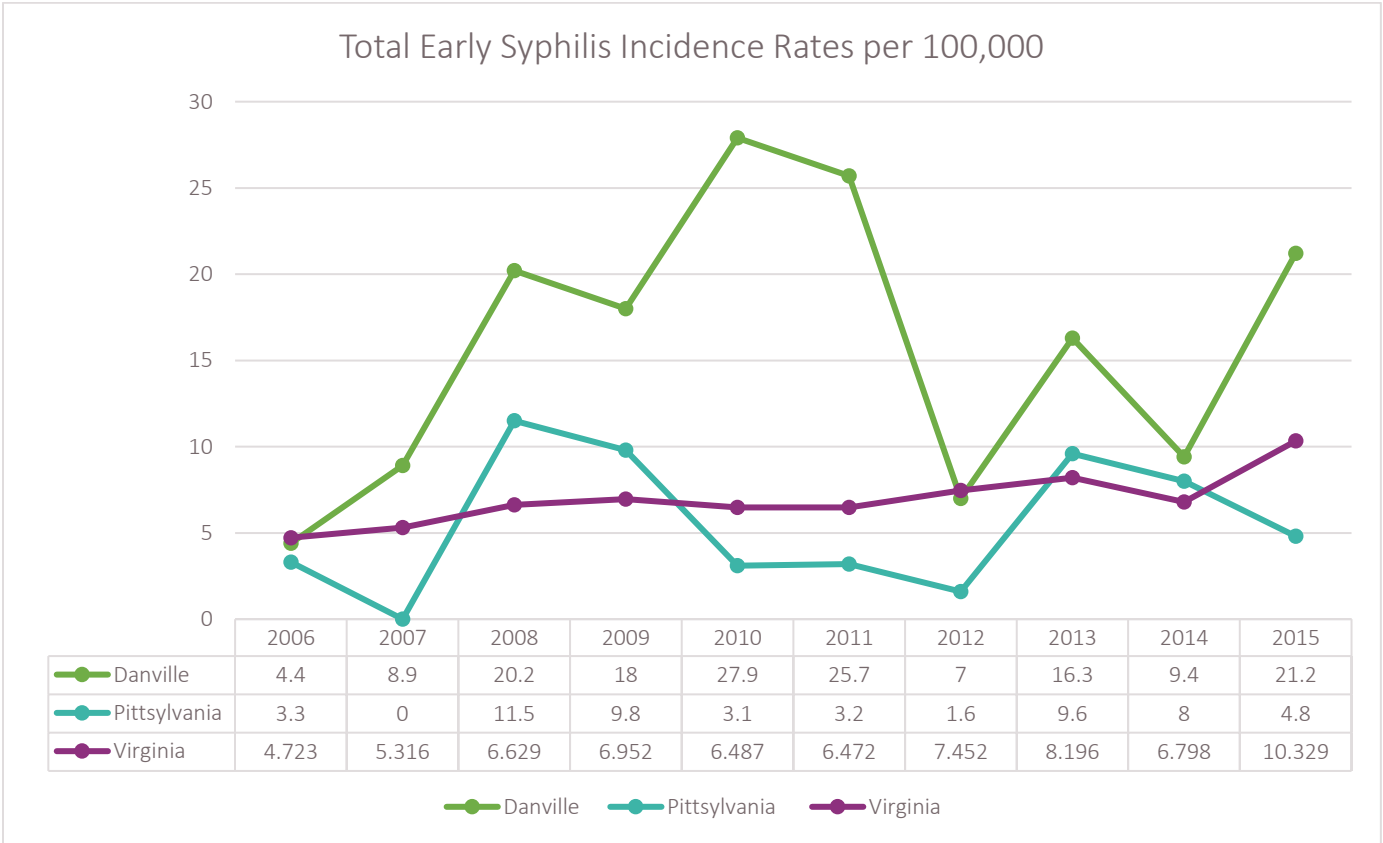
Total Early Syphilis

"Syphilis is a sexually transmitted disease (STD) caused by the bacterium Treponema pallidum.[cxciii]" If left untreated, Syphilis can have serious health impacts. Syphilis transmission occurs from "person to person by direct contact with a syphilitic sore, known as a chancre[cxciv]." In 2015, the Centers for Disease Control and Prevention estimated that there were 74,702 new cases of syphilis at all stages of the disease.



Total Early Syphilis Incidence Rate Map (VDH)

In Virginia (2015), the total number of early stages syphilis (primary, secondary and early latent Treponema pallidum infection) was 860 cases, equating to a rate of 10.3[cxcv]. For the same year, the City of Danville had a rate of 21.2 per 100,000 which was 2.05 times greater that the state rate. In addition, Danville's rate was also 4.42 times greater than Pittsylvania County's. During the years of data included below, Danville's highest early syphilis infection rate was in 2010 at 27.9. During this same year, Danville had the second highest infection rate in the state. Danville also had incidence rates among the top ten in the state during 2008 (5th), 2009 (8th) and 2011 (3rd)[cxcvi].



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Danville	4.4	8.9	20.2	18	27.9	25.7	7	16.3	9.4	21.2
Pittsylvania	3.3	0	11.5	9.8	3.1	3.2	1.6	9.6	8	4.8
Virginia	4.723	5.316	6.629	6.952	6.487	6.472	7.452	8.196	6.798	10.329

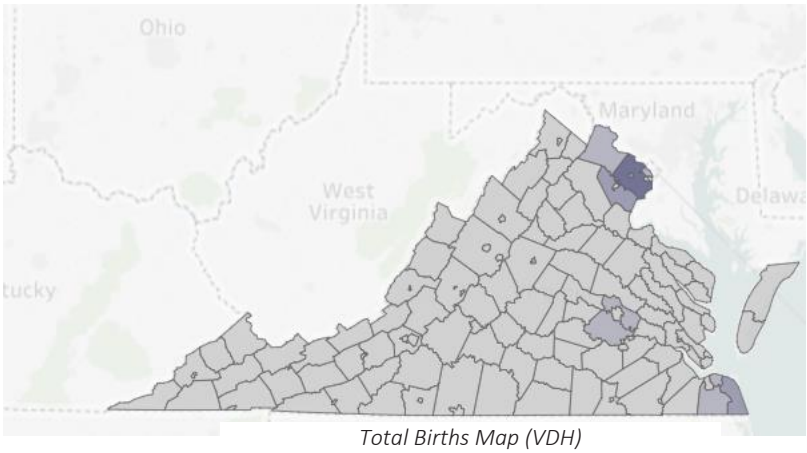
Sexually Transmitted Infection Conclusion

For each of the four sexually transmitted infections tracked in the Virginia Department of Health data portal, Danville had rates of infections that were higher than both Pittsylvania County's and the state's. In addition, Danville placed in or just outside of the top ten highest infection rates when looking at Gonorrhea, Chlamydia, HIV/ AIDS and early Syphilis. These high rates of sexually transmitted infections within the City could be indicators of profound risk taking around sexual activities and drug injections.

Danville's Infection Rates Ranked				
	Chlamydia	Gonorrhea	HIV/ AIDS	Total Early Syphilis
2015	9th			
2014	7th	6th		
2013	7th	4th		
2012	12th	3rd	11th	
2011	9th	6th	11th	3rd
2010	8th	5th		2nd
2009	8th	7th		8th
2008	10th	10th		5th
2007	11th			
2006	12th			

Maternal and Child Health

"Improving the well-being of mothers, infants and children is an important health goal for the United States. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system.[cxcvii]"



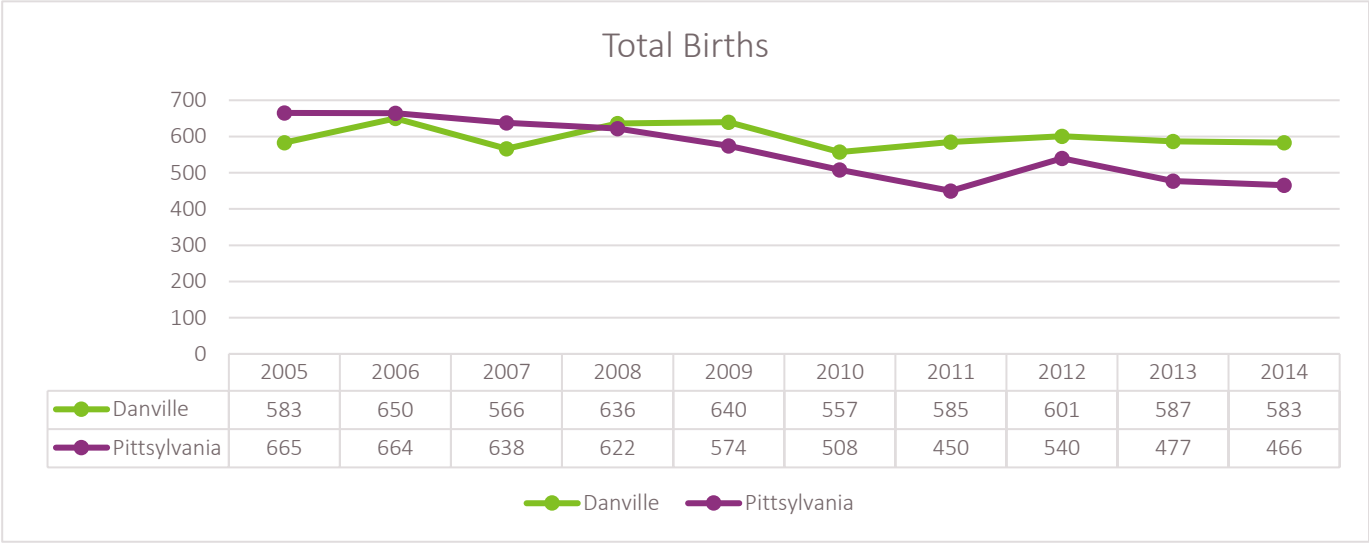
Total Births Map (VDH)

In 2014, there were 102,795 births in Virginia. Of these births, 9,389 were pre-term. In addition, 7,966 newborns had a low birth weight. 5,756 newborns had mothers who smoked during pregnancy and 2,883 received late or no prenatal care. 6,5551 pregnancies were experienced by teens ages 15-19. Furthermore, 599 infants died during their first year of life[cxcviii].

Total Births

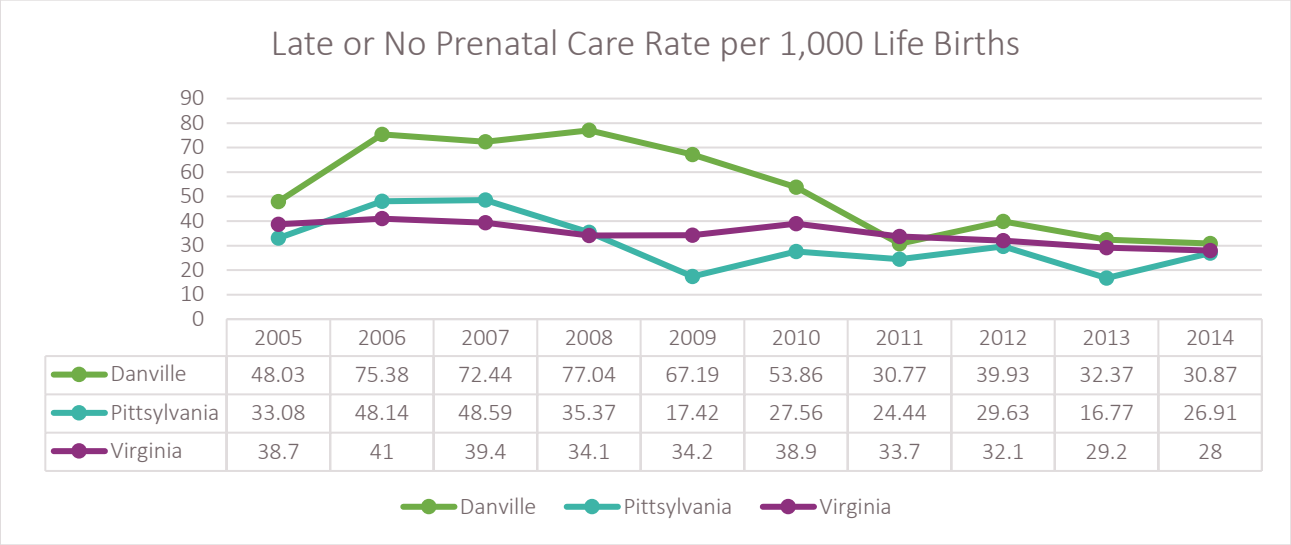
2005-2014 Total Births										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	583	650	566	636	640	557	585	601	587	583
Pittsylvania	665	664	638	622	574	508	450	540	477	466
Virginia	104,488	106,474	108,417	106,960	104,979	102,934	102,525	102,811	101,975	102,795

The total number of births in Virginia for 2014 was 102,795. The City of Danville saw 583 and Pittsylvania County had 466. From 2005 to 2014, in the City of Danville, there has been both increases and decreases in total births. Births went from 583 in 2005 to 650 in 2005, down to 585 in 2011 to ending up in 2014 with 583 births. In Pittsylvania County, there was more of a continued decline from 2005 with 665 births to 2011 with 450 births, before total births rose in 2012 to 540. However, since 2012, total births have continued to fall in the county.



Late or no Prenatal Care

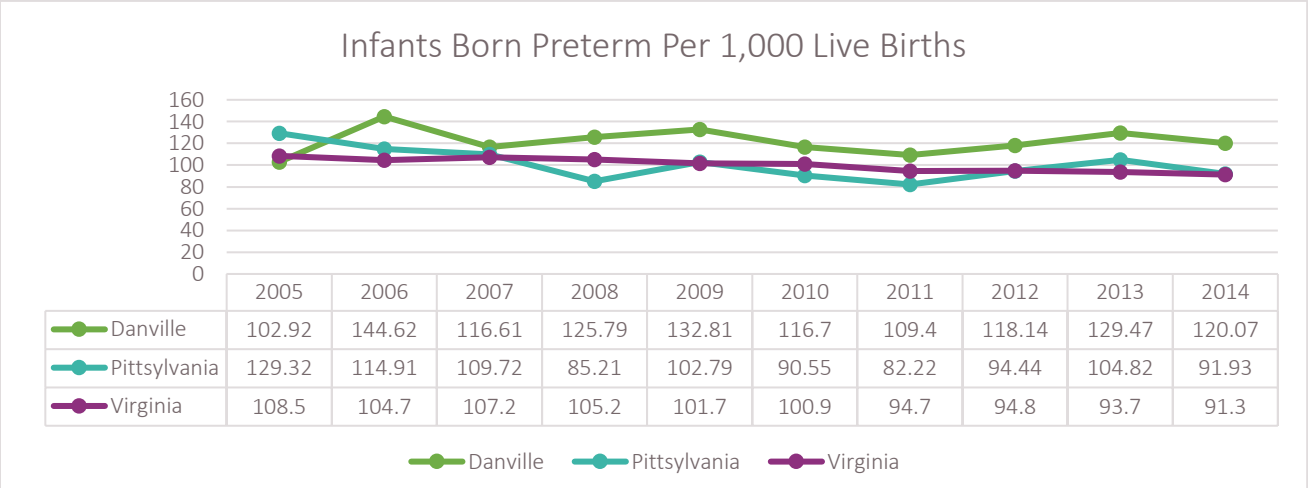
Late or no prenatal care is defined as the mother starting care later, in the third trimester, or receiving no prenatal care. For 2014, Virginia had a late or no prenatal care rate of 28 per 1,000 live births. In Danville, this rate was 30.87 and 26.01 in Pittsylvania County. In examining ten years of data (2005-2014), Danville, has historically had higher rates of mothers receiving late or no prenatal care. This rate peaked in 2008 with a rate of 77.04, which was the 16th highest in the state[cxcix]. However, since 2008 the rate has been in a general decline. Pittsylvania County's late or no prenatal care rate has predominantly stayed below the state's rate. The exception to this trend is the three-year period from 2006 to 2008[cc].



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	48.03	75.38	72.44	77.04	67.19	53.86	30.77	39.93	32.37	30.87
Pittsylvania	33.08	48.14	48.59	35.37	17.42	27.56	24.44	29.63	16.77	26.91
Virginia	38.7	41	39.4	34.1	34.2	38.9	33.7	32.1	29.2	28

Infants born preterm

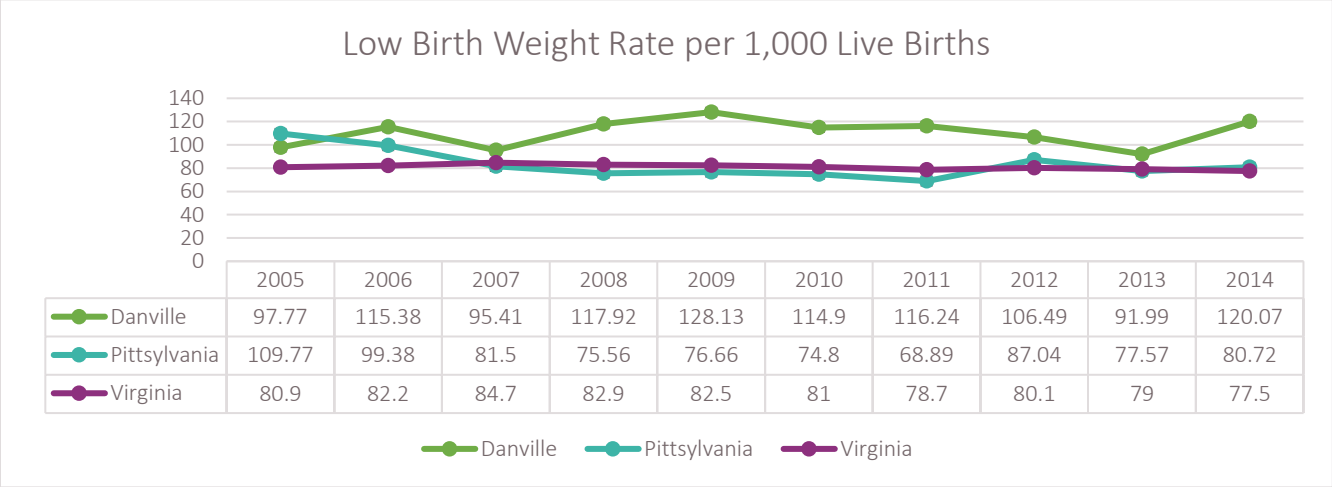
Infants born preterm is defined as those who were born before 37 complete weeks' gestation[cci]. In 2014, Virginia had an infants born preterm rate of 91.3 per 1,000 live births. Danville had the highest preterm birth rate at 120.07. In looking at the data points, Danville had the highest overall infant born preterm rates. In fact, while there was fluctuation in both the state and Pittsylvania County rates, they had an overall decline in preterm births. However, Danville had an increase in its preterm birth rate from 102.92 in 2005 to 120.07 in 2014[ccii].



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	102.92	144.62	116.61	125.79	132.81	116.7	109.4	118.14	129.47	120.07
Pittsylvania	129.32	114.91	109.72	85.21	102.79	90.55	82.22	94.44	104.82	91.93
Virginia	108.5	104.7	107.2	105.2	101.7	100.9	94.7	94.8	93.7	91.3

Low Birth Weight

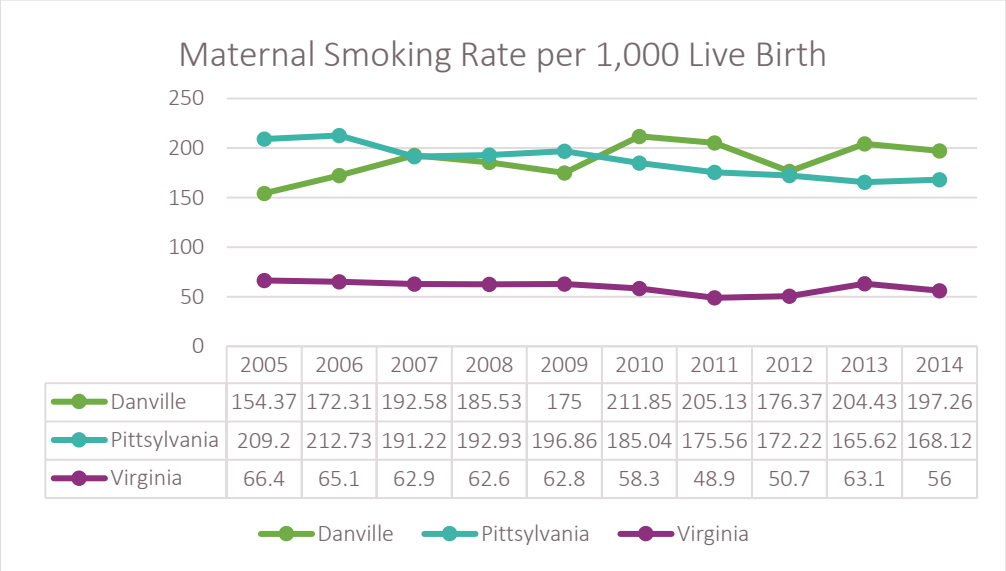
Low birth weight is defined as an infant's weight at birth being below 2,500 grams or 5 pounds 8 ounces. In 2014, the state had a low birth weight rate of 77.5. Compared to this, Pittsylvania County had a low birth weight rate of 80.72 while, Danville's was 120.07. From 2005 to 2014, Danville's low birth weight rate was always higher than the state's rate. In addition, Danville's rate was higher than Pittsylvania County's except for 2005 when the county's rate was 109.77 compared to the city's rate of 97.77.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	97.77	115.38	95.41	117.92	128.13	114.9	116.24	106.49	91.99	120.07
Pittsylvania	109.77	99.38	81.5	75.56	76.66	74.8	68.89	87.04	77.57	80.72
Virginia	80.9	82.2	84.7	82.9	82.5	81	78.7	80.1	79	77.5

Maternal Smoking

Maternal smoking is defined as mothers who smoked during pregnancy. In 2014, the state's maternal smoking rate was 56. In comparison, Danville's rate was 197.26 and Pittsylvania County's rate was 168.12[cciii]. As seen in the trend chart below, both Danville and Pittsylvania County have significantly higher rates of maternal smoking than the state. The maternal smoking rankings table, shows the years and ranking of when Danville and Pittsylvania County had one of the highest 15 maternal smoking rates in the state[cciv].



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	154.37	172.31	192.58	185.53	175	211.85	205.13	176.37	204.43	197.26
Pittsylvania	209.2	212.73	191.22	192.93	196.86	185.04	175.56	172.22	165.62	168.12
Virginia	66.4	65.1	62.9	62.6	62.8	58.3	48.9	50.7	63.1	56

Maternal Smoking Rankings		
	Danville	Pittsylvania
2014	11th	
2013	14th	
2012	10th	14th
2011	8th	15th
2010	12th	
2009		15th
2008	14th	13th
2007		11th
2006		11th
2005		9th

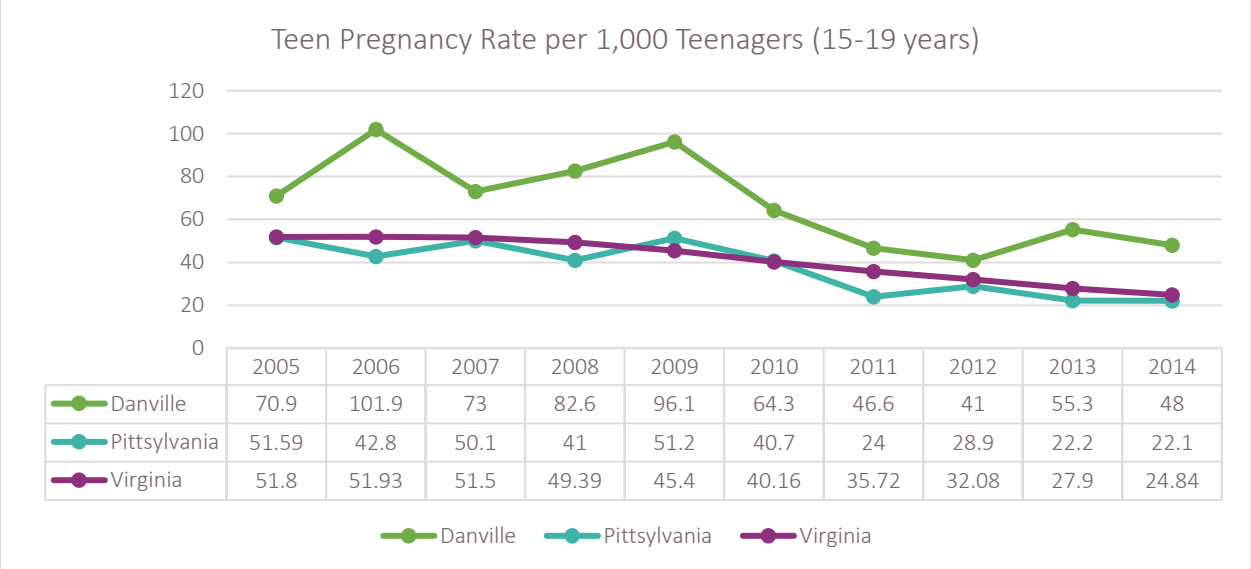
Infant Deaths

Infant deaths are defined as when an infant dies within his or her first year of life. As a health district, there has been a general decline in the number of infant deaths, which were their highest in 2006 and 2007.

	Number of Infant Deaths (died within the first year of life)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	9	14	10	4	7	9	7	4	5	2
Pittsylvania	7	4	8	5	4	6	1	-	1	6
Health District Total	16	18	18	9	11	15	8	4	6	8

Teen Pregnancy

Teen pregnancy is defined as the mother being between the ages of 15 and 19 at time of delivery and birth[ccv]. In addition, teen pregnancy incidence rates are calculated per 1,000 teenagers who are 15-19 years old. In 2014, the state had a teen pregnancy rate of 24.84. Pittsylvania County's rate was 22.1, but Danville's was 48.0, which was 1.9 times higher than the state rate and 2.17 times greater than Pittsylvania County's rate. For an outside comparison. The highest teen pregnancy rate in the state for 2014 was 108.8 (Covington City) which was 2.27 times greater than Danville's rate. In 2006, Danville saw a teen pregnancy rate of 101.9, which was 1.96 times greater than the state's rate and 2.38 times greater than Pittsylvania County's rate. The highest teen pregnancy rate in the state in 2006 was 169.2 (Petersburg City) which was 1.66 times greater than Danville's. In overall trends, the City of Danville's rates are higher than both the state's and Pittsylvania County's. Pittsylvania's rates are more on par with the state's rates, which have seen a constant decline since 2006. Danville however, continues to have teen pregnancy rates that are almost double that of the state and the county[ccvi].



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	70.9	101.9	73	82.6	96.1	64.3	46.6	41	55.3	48
Pittsylvania	51.59	42.8	50.1	41	51.2	40.7	24	28.9	22.2	22.1
Virginia	51.8	51.93	51.5	49.39	45.4	40.16	35.72	32.08	27.9	24.84

During the 2016-2017 Danville – Pittsylvania Community Health Survey 378 respondents voted for teen pregnancy 55 times as a top issue impacting community health. Teen pregnancy also received 11 votes from 57 focus group participants as a top issue impacting community health.

Maternal and Child Health Conclusion

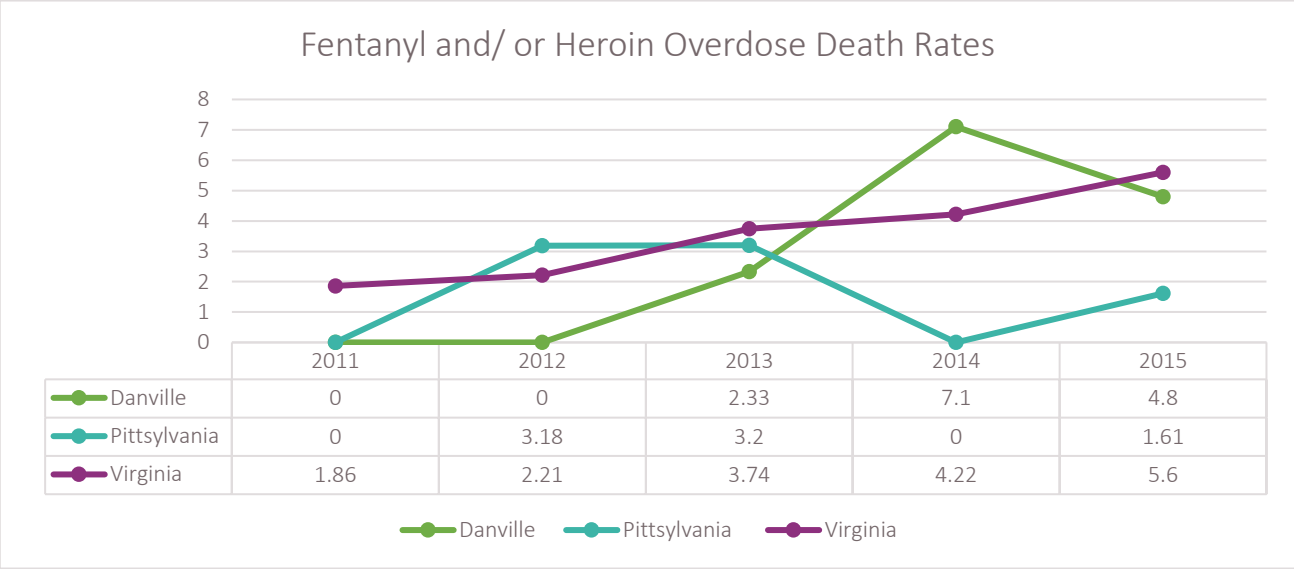
The City of Danville has higher rates of teen pregnancy, mothers who smoke, mothers who receive late or no prenatal care, babies born pre-term and babies born with low birth weights than the state and county. Pittsylvania County has higher rates of mothers who smoke during pregnancy than that state, while being very close to, or below state rates on other indicators. The higher rates of preterm birth and low birth weights could be impacted by the health behaviors examined in this section (smoking / tobacco use and not receiving prenatal care) as well as the health behaviors discussed earlier, like healthy eating. However, as with other health outcomes, personal behaviors only account for 30 percent of the factors that influence health. To understand more about the production of health and how the environments in which we are born, live, learn, work, play, pray and age impact maternal and child health, review the 2017 Health Equity Report.

Opioid Addiction

"Opioids are a class of drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and pain relievers available legally by prescription, such as oxycodone, hydrocodone, codeine, morphine and many others.[ccvii]" Per the Centers for Disease Control and Prevention, the amount of opioid prescriptions dispensed was nearly four times greater in 2013 than it was in 1999[ccviii]. On November 21st, 2016 Governor McAuliffe announced that the State Health Commissioner, Dr. Levine, had declared the Virginia Opioid addiction crisis a public health emergency[ccix].

Fentanyl and/ or Heroin Overdose Death Rates

In 2015, the state of Virginia, experienced 471 deaths due to Fentanyl and/ or Heroin overdose for a mortality rate of 5.6. In the City of Danville, the overall mortality rate for Fentanyl and/ or heroin overdose was 4.8. In Pittsylvania County, the mortality rate was 1.61. In 2014, Danville saw its highest Fentanyl / Heroin death rate at 7.1 or 3 deaths. In 2013, Pittsylvania County saw its highest Fentanyl/ Heroin death rate at 3.2, or 2 deaths.



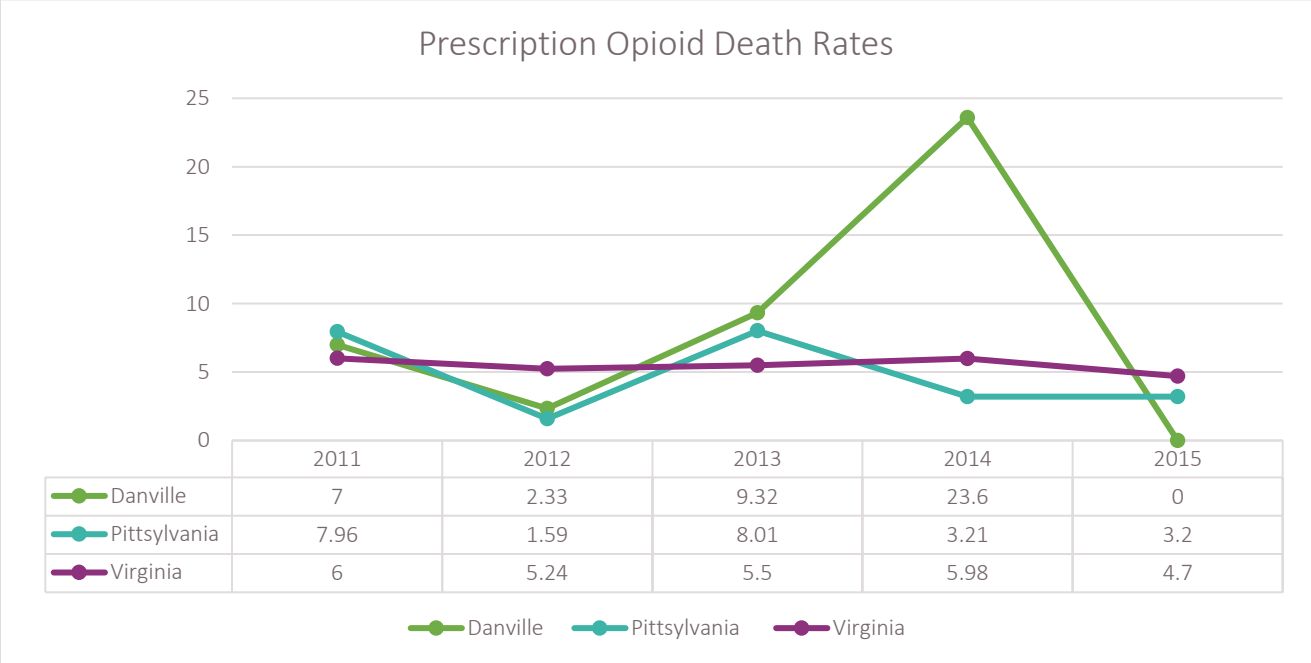
Fentanyl and/or Heroin Overdose Death Rates -- Danville by Age Group						
	2011	2012	2013	2014	2015	2016
0-14	-	-	-	-	-	N/A
15-24	-	-	17.94	-	-	N/A
25-34	-	-	-	-	-	N/A
35-44	-	-	-	-	24.3	N/A
45-54	-	-	-	37.7	19.4	N/A
55-64	-	-	-	16.4	-	N/A
65+	-	-	-	-	-	N/A
All Ages	-	-	2.33	7.1	4.8	N/A

Fentanyl and/or Heroin Overdose Death Rates -- Pittsylvania by Age Group						
	2011	2012	2013	2014	2015	2016
0-14	-	-	-	-	-	N/A
15-24	-	-	-	-	14.39	N/A
25-34	-	31.79	-	-	-	N/A
35-44	-	-	13.42	-	-	N/A
45-54	-	-	-	-	-	N/A
55-64	-	-	10.29	-	-	N/A
65+	-	-	-	-	-	N/A
All Ages	-	3.18	3.2	-	1.61	N/A

In 2015, those 35-44 in Danville had the highest death rate. In the county, the age group most impacted in 2015 were those 15-24 years old.

Prescription Opioid Overdose Death Rates

In 2015, Virginia had 398 prescription opioid deaths, which resulted in a mortality rate of 4.7. In the City of Danville, there were zero cases of mortality by prescription based opioids. In Pittsylvania County, the morality rate was 3.2, or 3 deaths. In 2014, Danville experienced a mortality rate of 23.6, or 10 deaths. In 2013, Pittsylvania County saw its highest prescription opioid death rate at 8.01, or 5 deaths.



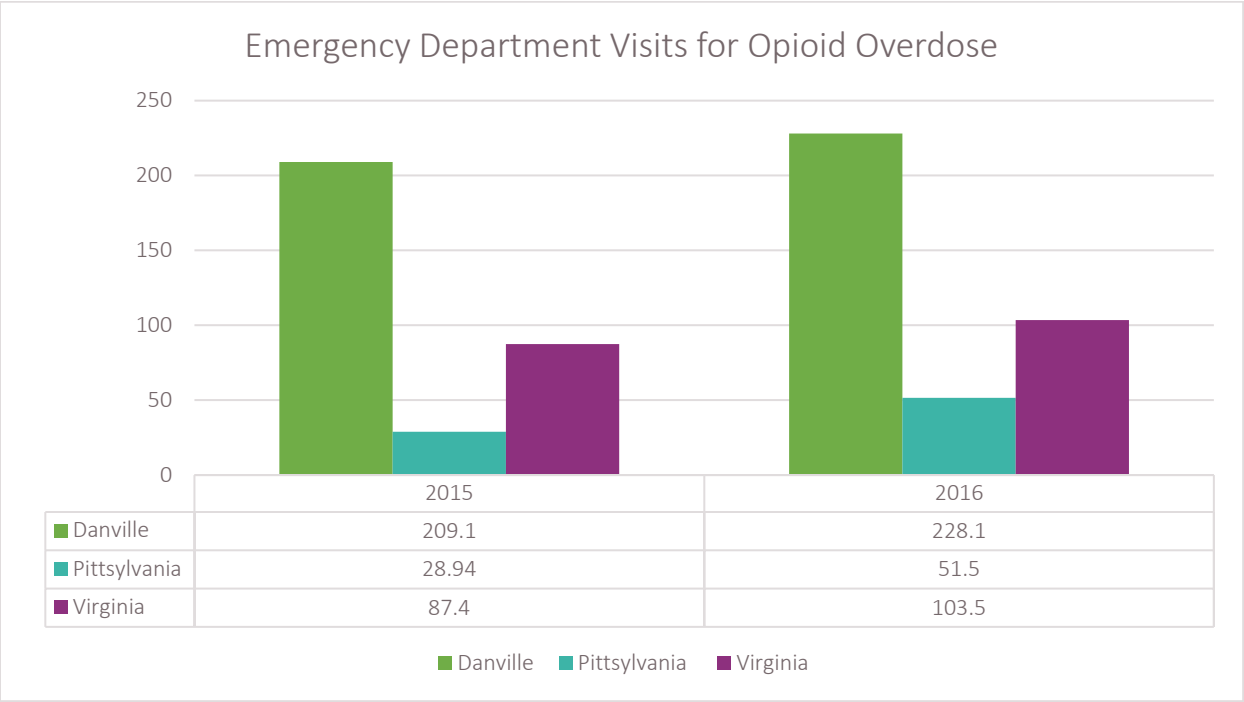
Prescription Opioid Overdose Death Rates -- Danville by age group						
	2011	2012	2013	2014	2015	2016
0-14	-	-	-	12.5	-	No Data
15-24	-	-	-	-	-	No Data
25-34	21.23	20.73	19.83	19.8	-	No Data
35-44	-	-	-	47.4	-	No Data
45-54	33.85	-	18.21	75.4	-	No Data
55-64	-	-	32.52	16.4	-	No Data
65+	-	-	-	11.9	-	No Data
All Ages	7	2.33	9.32	23.6	-	No Data

Prescription Opioid Overdose Death Rates -- Pittsylvania by age group						
	2011	2012	2013	2014	2015	2016
0-14	9.36	-	-	-	-	No Data
15-24	-	-	-	-	-	No Data
25-34	-	15.89	16.2	-	-	No Data
35-44	12.97	-	26.85	27.57	14.19	No Data
45-54	28.9	-	20.3	-	10.68	No Data
55-64	-	-	-	-	-	No Data
65+	-	-	-	-	-	No Data
All Ages	7.96	1.59	8.01	3.21	3.2	No Data

In 2014, the Danville age group with the highest prescription opioid overdose death rate was the 45-54 age group. In the county for 2014 and 2015, the age group with the highest death rate was 35 to 44.

Emergency Department Visits for Opioid Overdose

In 2015, emergency department visits for opioid overdose in Virginia had a hospitalization rate of 87.4 and equated to 7,326 visits. In 2016, this rate had risen to 103.5 or 8,686 visits. In the City of Danville, the 2015 emergency department visit rate was 209.1. In 2016 that rate rose to 228.1. Emergency room visits also increased in Pittsylvania going from 28.94 to 51.5.



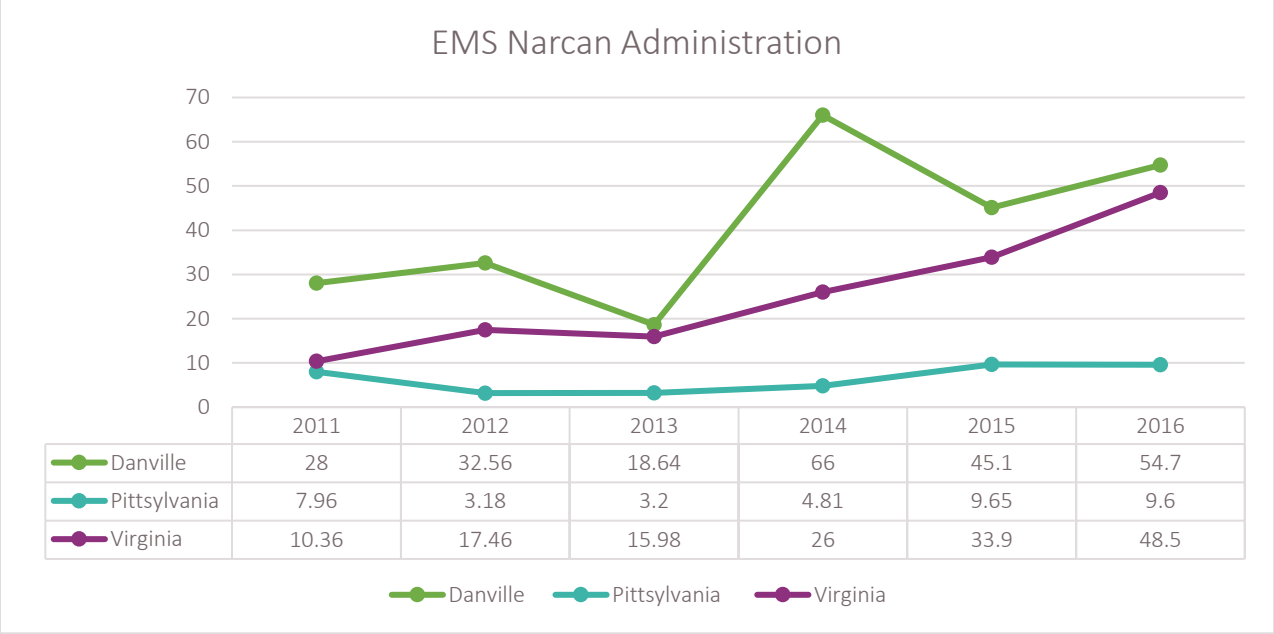
Opioid Emergency Department Visit Rates -- Danville by age group						
	2011	2012	2013	2014	2015	2016
0-14	No Data	No Data	No Data	No Data	167.1	77.1
15-24	No Data	No Data	No Data	No Data	379.9	493.9
25-34	No Data	No Data	No Data	No Data	518.7	480.3
35-44	No Data	No Data	No Data	No Data	169.9	194.2
45-54	No Data	No Data	No Data	No Data	155.4	310.7
55-64	No Data	No Data	No Data	No Data	82.2	148
65+	No Data	No Data	No Data	No Data	94.3	70.8
All Ages	No Data	No Data	No Data	No Data	209.1	228.1

Opioid Emergency Department Visit Rates -- Pittsylvania By Age Group						
	2011	2012	2013	2014	2015	2016
0-14	No Data	No Data	No Data	No Data	10.1	20.2
15-24	No Data	No Data	No Data	No Data	57.57	115.1
25-34	No Data	No Data	No Data	No Data	63.5	111.1
35-44	No Data	No Data	No Data	No Data	56.75	56.8
45-54	No Data	No Data	No Data	No Data	32.05	32.1
55-64	No Data	No Data	No Data	No Data	10.15	30.4
65+	No Data	No Data	No Data	No Data	7.82	39.1
All Ages	No Data	No Data	No Data	No Data	28.94	51.5

In 2015 the age group who had the highest Opioid related emergency department visits in Danville belonged to those between the ages of 25 and 34. In 2016 the groups shifted and the highest rate belonged to those 15 to 24. In the county, the most impacted age group in 2015 were those between the ages of 15 to 24. This stayed true in 2016, but the rate increased from 57.57 to 115.1.

EMS Narcan Administration

"Narcan is a prescription medicine used for the treatment of an opioid emergency such as an overdose or a possible opioid overdose with signs of breathing problems and severe sleepiness or not being able to respond.[ccx]" Danville had the overall highest rates of Narcan administration, followed by the state and then Pittsylvania County. In 2016, Danville's Narcan administration rate was calculated at 54.7. From 2013 to 2014 for the city, the rate jumped from 18.64 to 66.



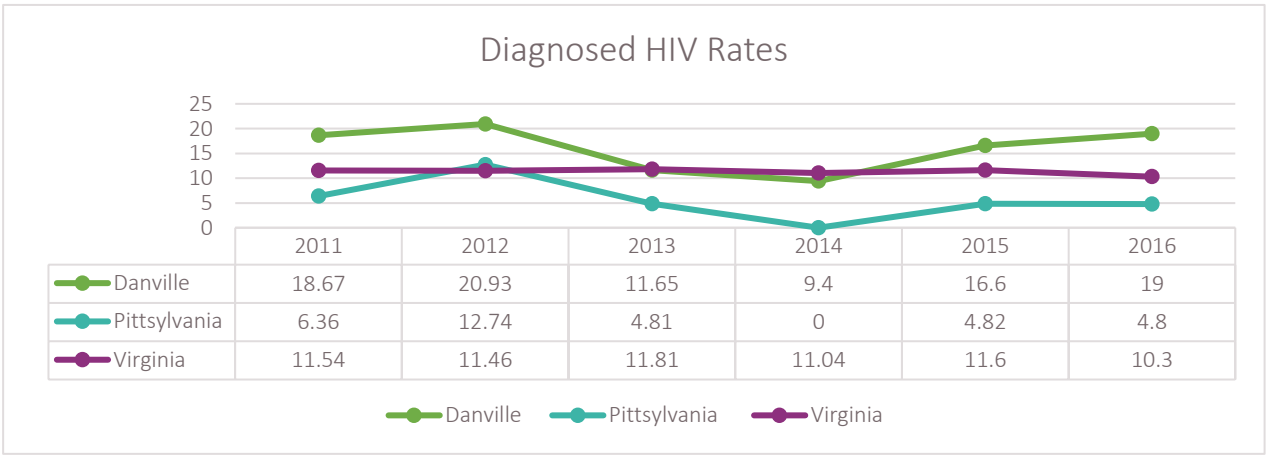
EMS Narcan Administration Rates -- Danville By Age Group						
	2011	2012	2013	2014	2015	2016
0-14	-	-	-	12.5	25.7	12.9
15-24	53.14	17.45	-	55.9	-	76
25-34	21.23	41.45	19.83	59.3	76.8	76.8
35-44	44.31	90.33	23.14	23.7	48.6	24.3
45-54	33.85	52.42	36.43	113.1	97.1	38.8
55-64	49.42	45.59	32.52	81.8	16.4	82.2
65+	12.18	12.18	24.16	107.4	59	70.8
All Ages	28	32.56	18.64	66	45.1	54.7

EMS Narcan Administration Rates -- Pittsylvania By Age Group						
	2011	2012	2013	2014	2015	2016
0-14	-	-	-	-	-	10.1
15-24	-	14.22	-	-	14.39	14.4
25-34	15.91	-	16.2	16.07	-	31.8
35-44	25.94	-	-	13.79	14.19	-
45-54	9.63	9.89	-	10.4	21.37	10.7
55-64	-	-	-	-	10.15	-
65+	8.99	-	8.32	-	7.82	7.8
All Ages	7.96	3.18	3.2	4.81	9.65	9.6

Looking at the age related Narcan administration data for Danville and Pittsylvania County shows that in 2016 those who were 55 to 64 years in age in the city of Danville the highest Narcan administration by EMS rates than any other age group. For Pittsylvania County, the 25 to 34 age group had the highest EMS administered Narcan rates. Overall, Danville's Narcan administration rate was 5.7 times higher than the county's in 2016.

Diagnosed HIV

With HIV/AIDS transmission possible through syringes and other drug injection devices, HIV rates are being closely monitored as part of the state's opioid addiction indicators.



The trend chart above shows that Danville has the highest rates of diagnosed HIV. The rates are higher than Pittsylvania County and the state. For example, in 2016 the rate for Danville was 19 compared to 4.8 for Pittsylvania County.

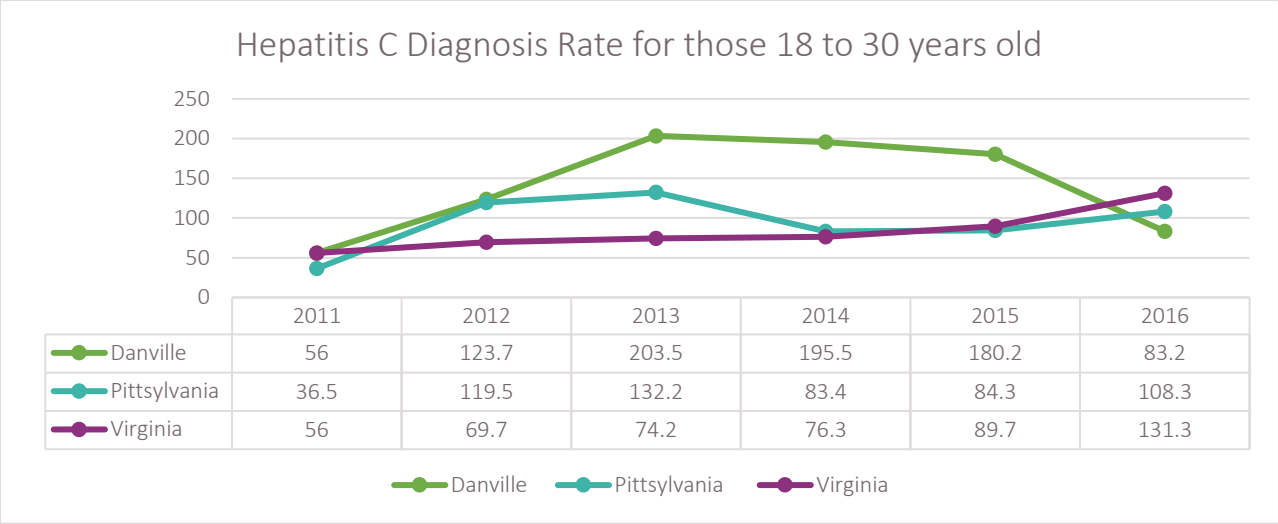
Diagnosed HIV Rates -- Danville By Age Breakdown						
	2011	2012	2013	2014	2015	2016
0-14	-	-	-	-	-	-
15-24	35.43	34.9	-	37.3	38	76
25-34	-	62.18	59.5	19.8	57.6	38.4
35-44	44.31	-	-	-	24.3	24.3
45-54	50.78	69.89	18.21	18.9	-	19.4
55-64	-	-	16.26	-	16.4	-
65+	12.18	-	-	-	-	-
All Ages	18.67	20.93	11.65	9.4	16.6	19

Diagnosed HIV Rates -- Pittsylvania By Age Breakdown						
	2011	2012	2013	2014	2015	2016
0-14	-	-	-	-	-	-
15-24	-	42.66	-	-	14.39	14.4
25-34	31.82	31.79	-	-	31.75	15.9
35-44	25.94	13.33	13.42	-	-	-
45-54	-	19.77	10.15	-	-	-
55-64	-	-	10.29	-	-	10.1
65+	-	-	-	-	-	-
All Ages	6.36	12.74	4.81	-	4.82	4.8

In 2016, the city's age group to have the highest HIV rates were those 15 to 24. In the county those who were 25 to 34 had a higher incidence rate.

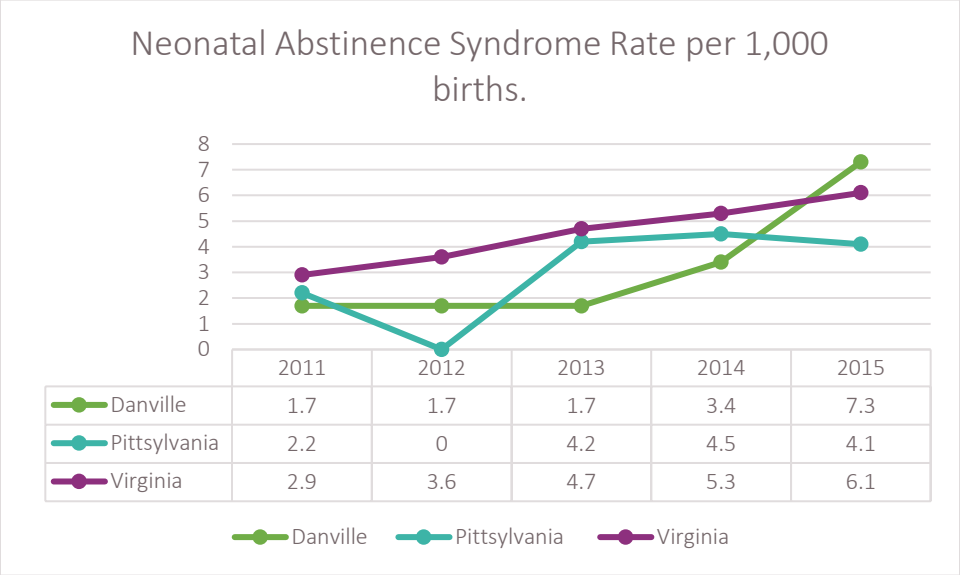
Hepatitis C in 18-30 Age Group

Another communicable disease that can be spread by shared needles and other drug injection devices is Hepatitis C. The chart below specifically looks at new cases where the infected are between the ages of 18 and 30. In 2011, Danville started out even with the state rate of 56. However, from 2012 to 2013, the Hepatitis C rate increased, before it started decreasing in 2014, falling below both the state rate and the rate for Pittsylvania County in 2016. Pittsylvania County's Hepatitis C rates started out lower than the state rate, before become three times as large in 2012 and 2013. Much like in Danville, the rates began to decline after 2013 and fell back down below the state rate.



Neonatal Abstinence Syndrome

Neonatal Abstinence Syndrome (NAS) is a "drug withdrawal syndrome that occurs primarily among opioid exposed infants shortly after birth[ccxi]". Newborns experience tremors, seizures, excessive crying, sleep disturbances, increased sweating, temperature instability, and more. In the trend chart below, all three localities: Danville, Pittsylvania County and Virginia have seen increases in NAS. The city of Danville rate more than double between 2014 and 2015 becoming 5.6 times greater than its 2011 rate. The county nearly double its NAS rate between 2011 2015.

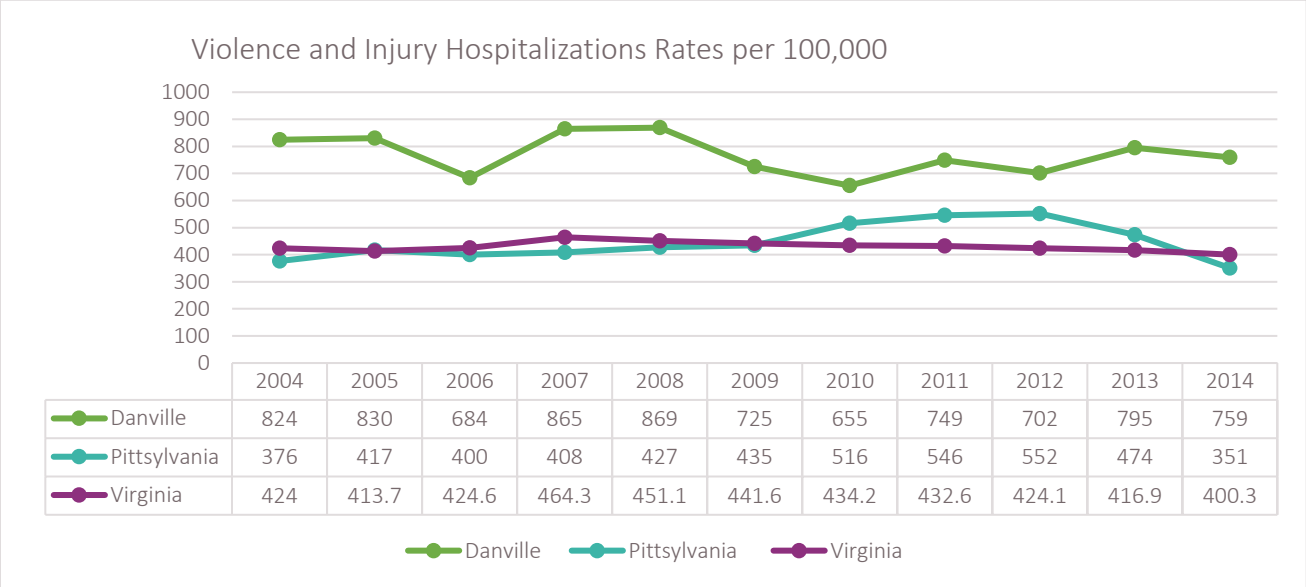


As part of the Danville – Pittsylvania County Community Health Survey, respondents (answered by 396) were asked to vote for issues impacting health at both the family and community level. 40 survey respondents voted for substance abuse (including drug use) as a family health issue. Substance abuse (including drug use) also received 194 votes from survey respondents as a community health issue. Furthermore, when asked to vote on community health issues, focus group participants selected substance abuse (including drug use) 11 times. Going a step farther, survey participants were asked how satisfied they were with the level of access to alcohol and drug treatment services for both adults and youth. Of the 393 survey participants, 29.5% were not satisfied with alcohol and drug treatment options for adults and 15.8% of survey respondents indicated that they were somewhat satisfied with treatment

options. However, 50.4% of respondents selected “don’t know” in response to how satisfied they were with the accessibility of alcohol and drug treatment services for adults. When asked the same question, but in terms of services for youth, 390 survey participants responded. Of those who did, 32.8% indicated that they were not satisfied, while 52.8% were unsure.

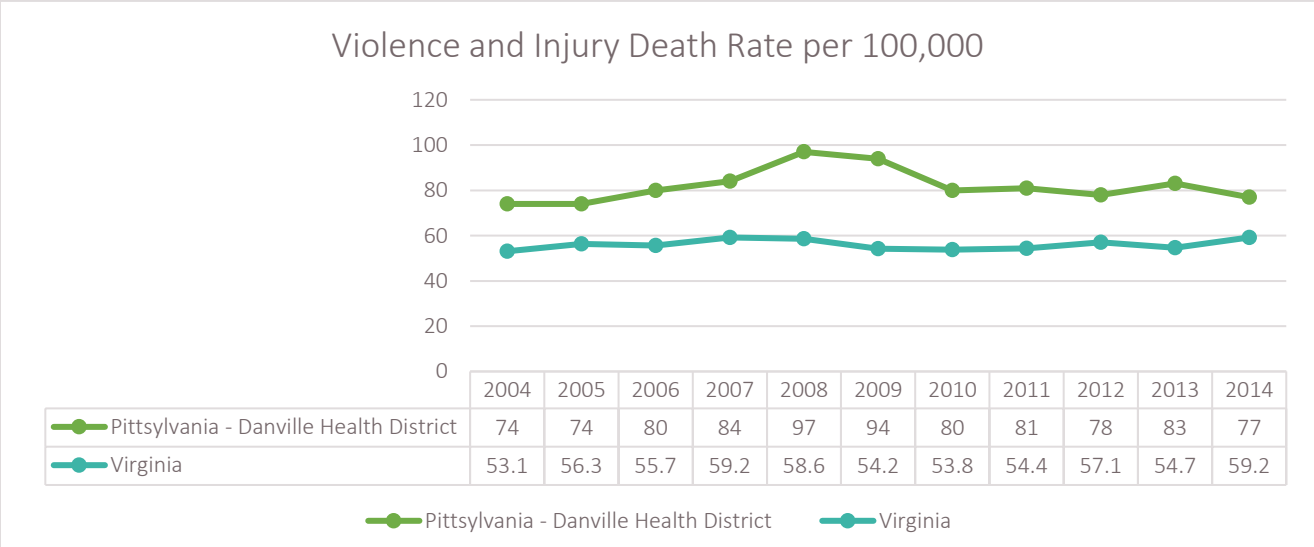
Violence and Injury

Through the eleven years of trend data, the City of Danville has had the highest violence and injury hospitalization rates. The hospitalization rates for the city are close to two times that of both Pittsylvania County and the state on numerous occasions including in 2004, 2005, 2007, 2008, and 2013.



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	824	830	684	865	869	725	655	749	702	795	759
Pittsylvania	376	417	400	408	427	435	516	546	552	474	351
Virginia	424	413.7	424.6	464.3	451.1	441.6	434.2	432.6	424.1	416.9	400.3

Higher rates of hospitalization for Danville than the state, also translates into a higher death rate for the Pittsylvania – Danville Health District. The health district’s higher death rates hold true throughout all eleven years of trend data. In 2009, the largest difference in death rates occur when the Pittsylvania – Danville Health District death rate was 1.73 times greater than the state rate.

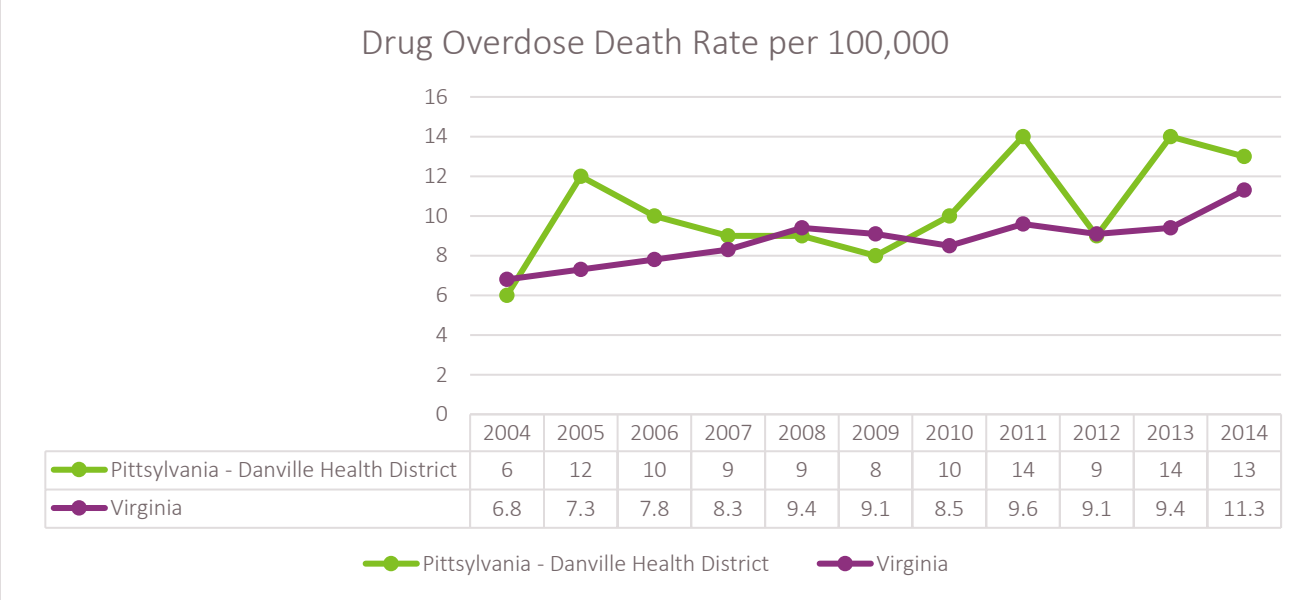


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pittsylvania - Danville Health District	74	74	80	84	97	94	80	81	78	83	77
Virginia	53.1	56.3	55.7	59.2	58.6	54.2	53.8	54.4	57.1	54.7	59.2

Drug Overdose Death Rate

Drug overdose is "defined as a Virginia resident death case where the underlying cause of death was attributable to poisonings involving drugs of any kind (licit or Illicit). These cases are a subset of all poisoning deaths and include drug overdoses attributable to unintentional and intentional causes or causes of undetermined or other intent.[ccxii]"

The death rates per 100,000 for each location meet and cross as different points throughout the eleven years. While the state rates form a tighter trend line with a general increase in deaths, the death rate trend line for the health district is made of steeper increases and decreases[ccxiii].

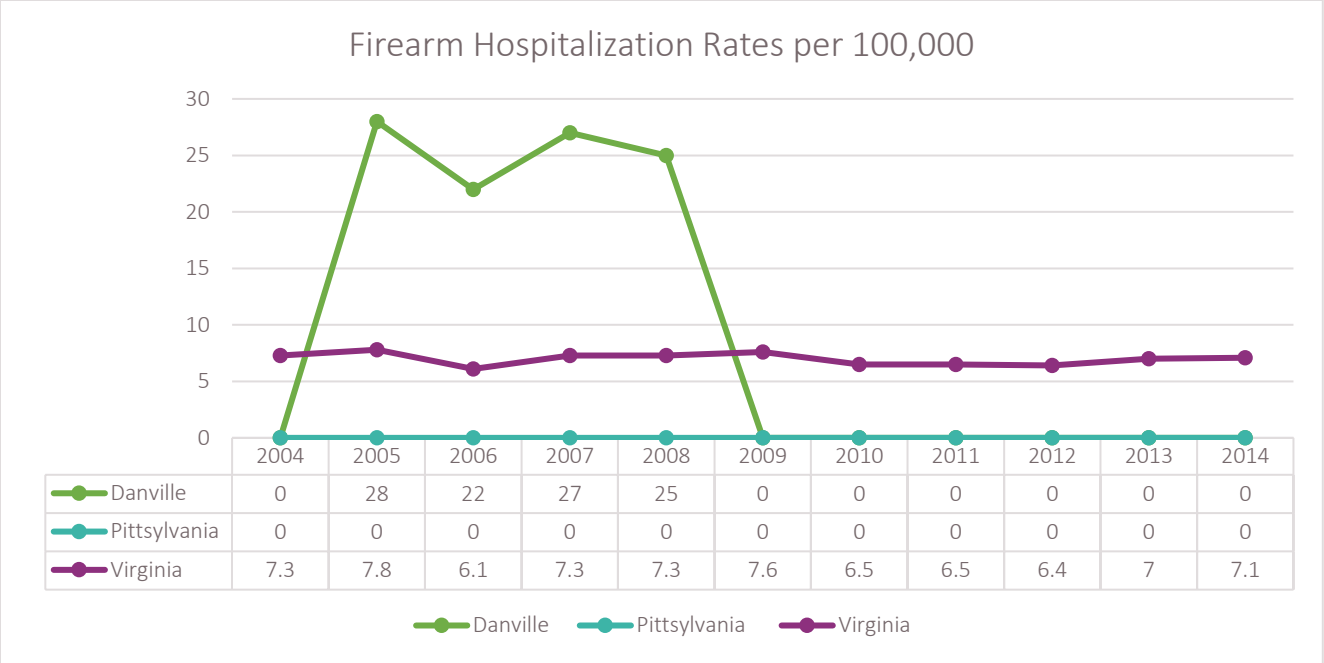


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pittsylvania - Danville Health District	6	12	10	9	9	8	10	14	9	14	13
Virginia	6.8	7.3	7.8	8.3	9.4	9.1	8.5	9.6	9.1	9.4	11.3

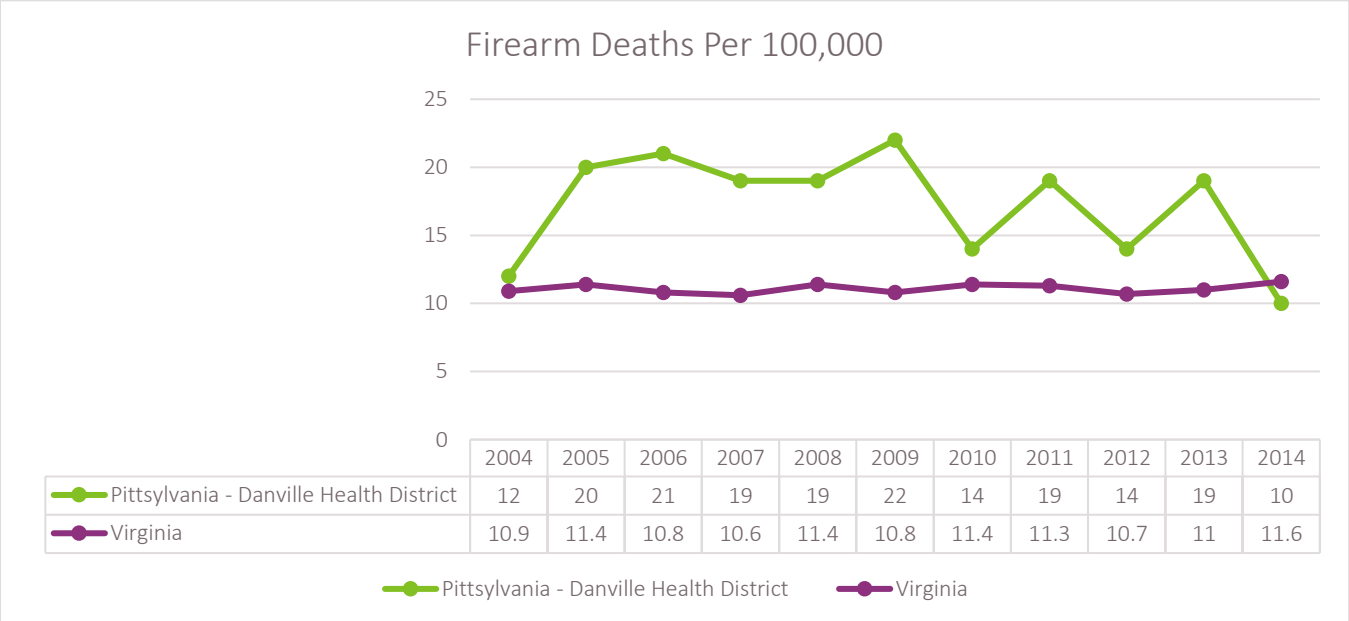
Firearm Hospitalizations and Deaths

"Firearm injury hospitalizations are defined as an inpatient, acute care hospitalization discharge of a Virginia residents where the hospitalizing injury was the result of a firearm and where intent fell into any category (unintentional, homicide, suicide, undetermined or other)"[ccxiv].

In the trend chart below, Pittsylvania County has had one of lowest firearm hospitalization rates in the state with a rate of 0.0 for all eleven years. From 2005 to 2008, the city experienced firearm hospitalization rates that were 3.59 times, 3.61 times, 3.7 times, and 3.42 times greater than the state rate, before dropping down to 0.0 for 2009 to 2014.



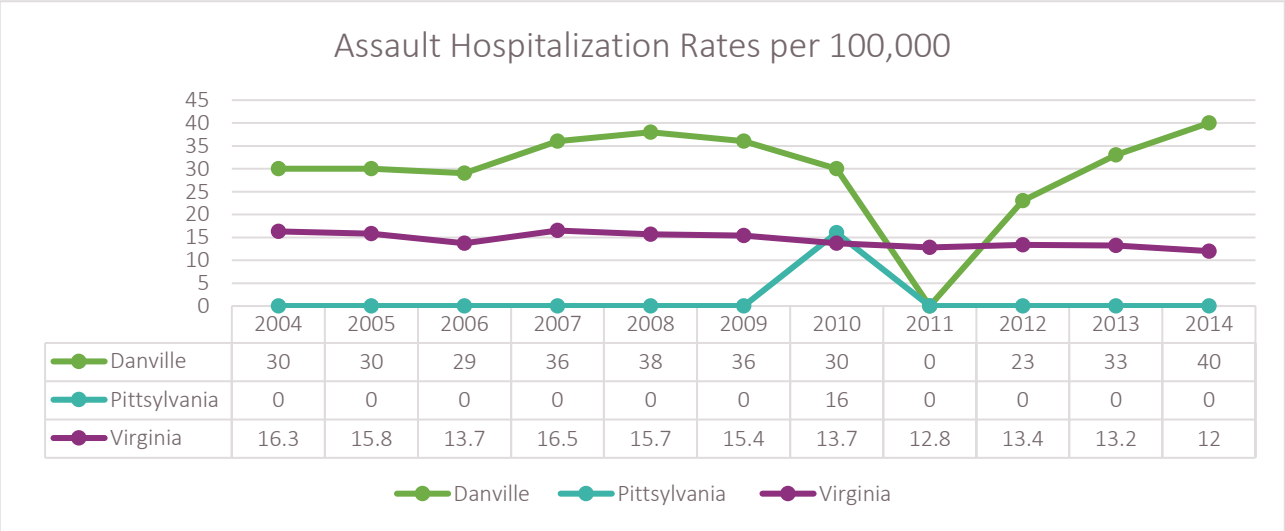
Firearm death rates are defined as a Virginia resident death case where the underlying cause of death was as an injury caused by a firearm and the intent fell into any category (unintentional, homicide, suicide, undetermined and other[ccxv]. For all but one year (2014) the Pittsylvania – Danville Health District had a higher rate of firearm deaths than the state of Virginia. The largest rate difference occurred in 2009 when the health district's rate was 2.04 times greater than the state rate. This death rate also occurred in a year where there were no firearm hospitalizations for the city or the county.



Assault Hospitalization

Assault hospitalizations are defined as an inpatient, acute care hospitalization discharge of a Virginia resident whose hospitalization was the result of assault where the injury was determined to have been caused by another person. These cases many or may not have met the criminal justice definition of assault" [ccxvi].

In 2014, the Centers for Disease Control and Prevention calculated that 1.4 million emergency room visits were due to assaults[ccxvii]. In the assault hospitalization trend data below, the City of Danville had higher rates than that of the state and Pittsylvania County. Its highest assault hospitalization rate occurred in 2014 with a rate of 40. This rate was 3.33 times greater than the state rate. Danville's lowest assault hospitalization rate was in 2011 when there was no reported assault based hospitalizations. Pittsylvania County had the lowest assault hospitalization rate of the three areas included, except for 2010, when the county had a hospitalization rate of 16 compared the state's rate of 13.7[ccxviii].

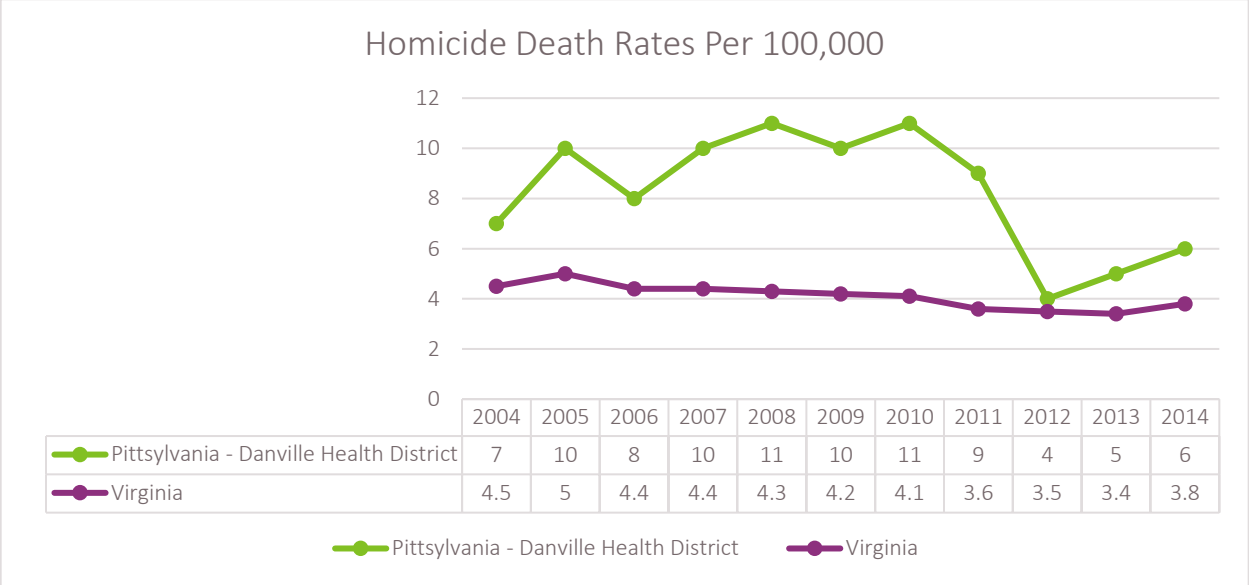


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	30	30	29	36	38	36	30	0	23	33	40
Pittsylvania	0	0	0	0	0	0	16	0	0	0	0
Virginia	16.3	15.8	13.7	16.5	15.7	15.4	13.7	12.8	13.4	13.2	12

Homicide Death Rates

"Homicide deaths are defined as a Virginia resident death case where the underlying cause of death was the result of assault or where the injury was determined to have been caused by another person. These cases may or may not meet the criminal justice definition of homicide"[ccxix].

The Pittsylvania – Danville Health District's homicide rates were higher than the state rate during the years studied below. The years with the highest homicide rate for the health district were 2008 and 2010 when the homicide death rate was 11. The lowest homicide death rate for the health district came in 2012 with the death rate of 4.

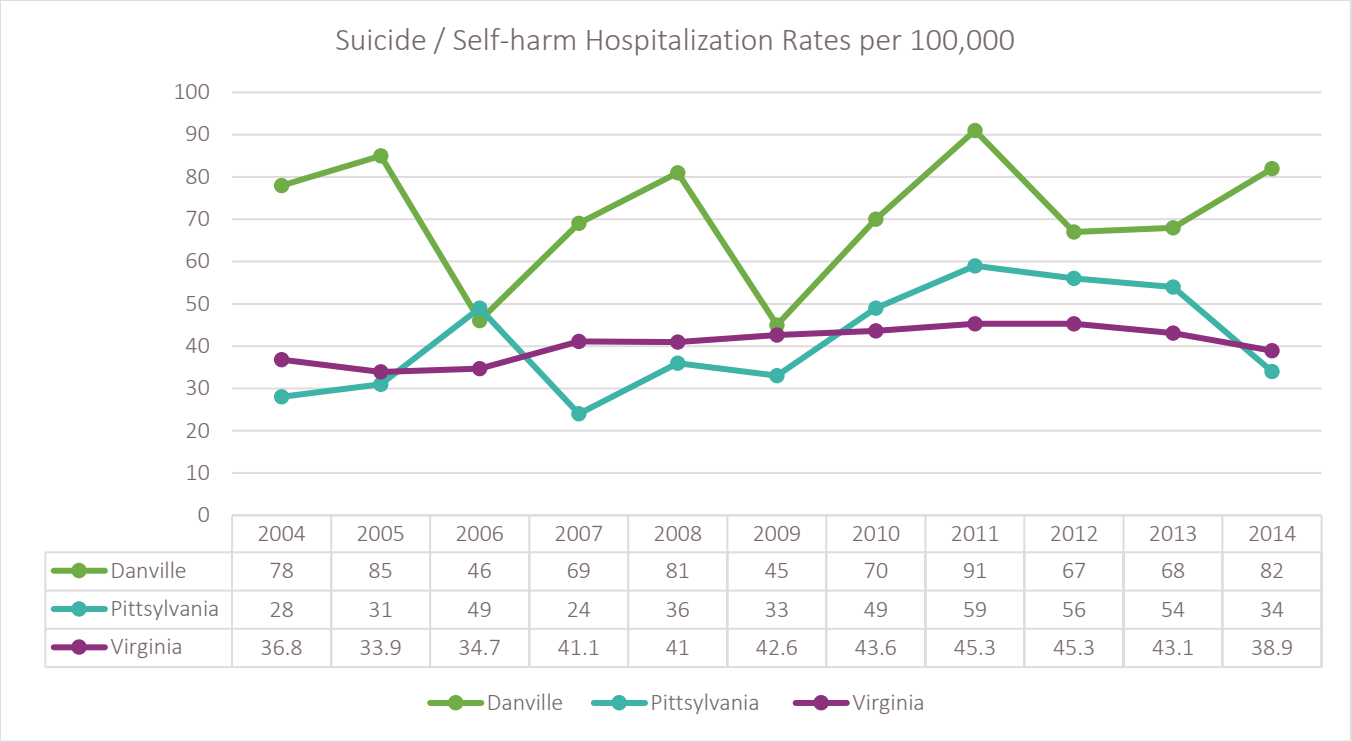


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pittsylvania - Danville Health District	7	10	8	10	11	10	11	9	4	5	6
Virginia	4.5	5	4.4	4.4	4.3	4.2	4.1	3.6	3.5	3.4	3.8

Suicide Hospitalization and Deaths

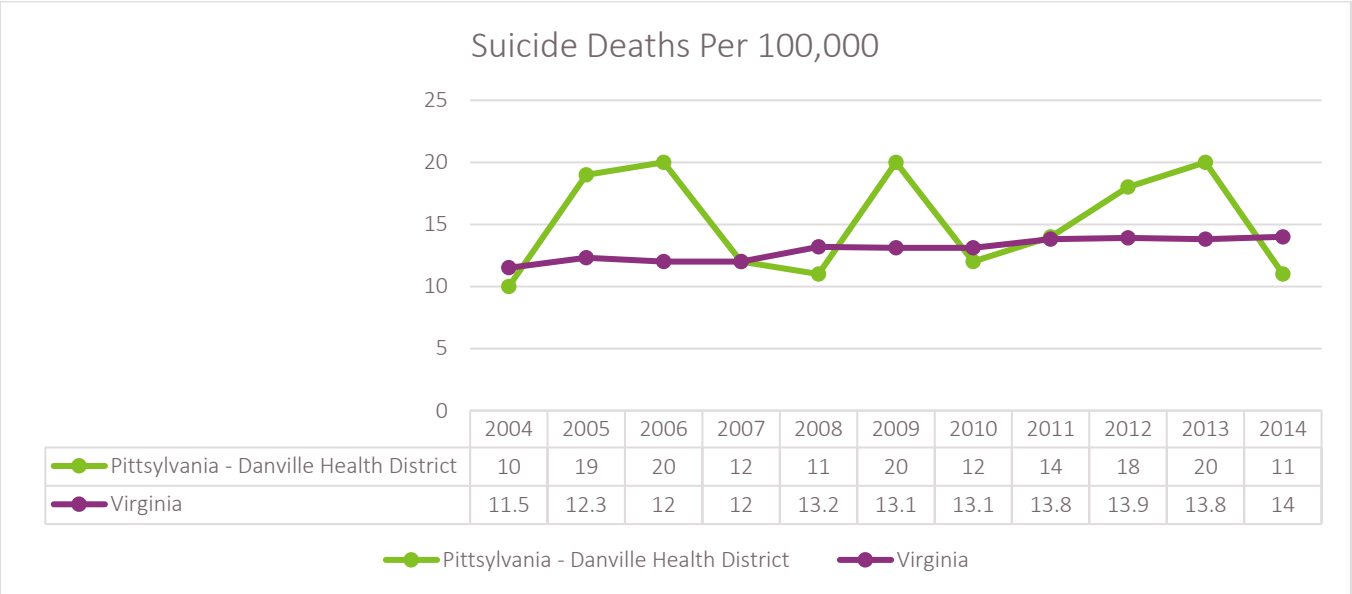
Suicide hospitalizations, or self-harm injuries are defined as inpatient, acute care hospitalization discharge of a Virginia resident where the primary diagnosis was injury or injuries were the result of intentional self-harms such as suicide attempts[ccxx].

The self-harm and suicide hospitalization rates are generally higher for the city of Danville than for Pittsylvania County or the state. There was one instance in 2006, when the county's self-harm/suicide hospitalization rate was higher than that of the city. In 2011, Danville had a suicide/self-harm hospitalization rate of 91, which was 2 times that of the state and 1.54 times that of Pittsylvania County[ccxxi].



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	78	85	46	69	81	45	70	91	67	68	82
Pittsylvania	28	31	49	24	36	33	49	59	56	54	34
Virginia	36.8	33.9	34.7	41.1	41	42.6	43.6	45.3	45.3	43.1	38.9

Suicide deaths are defined as a Virginia resident death case where the underlying cause of death was the result of intentional self-harm[ccxxii]. The Suicide death rates for the Pittsylvania – Danville Health District are generally higher than those of the state. There were four years in the 2004 to 2014 timeframe in which the state rate was higher, 2004, 2008, 2010 and 2014. The highest death rates for the health district were seen in 2006, 2009, and 2013 when the rate per 100,000 was 20. The lowest suicide death rate occurred in 2004 with a rate of 4[ccxxiii].

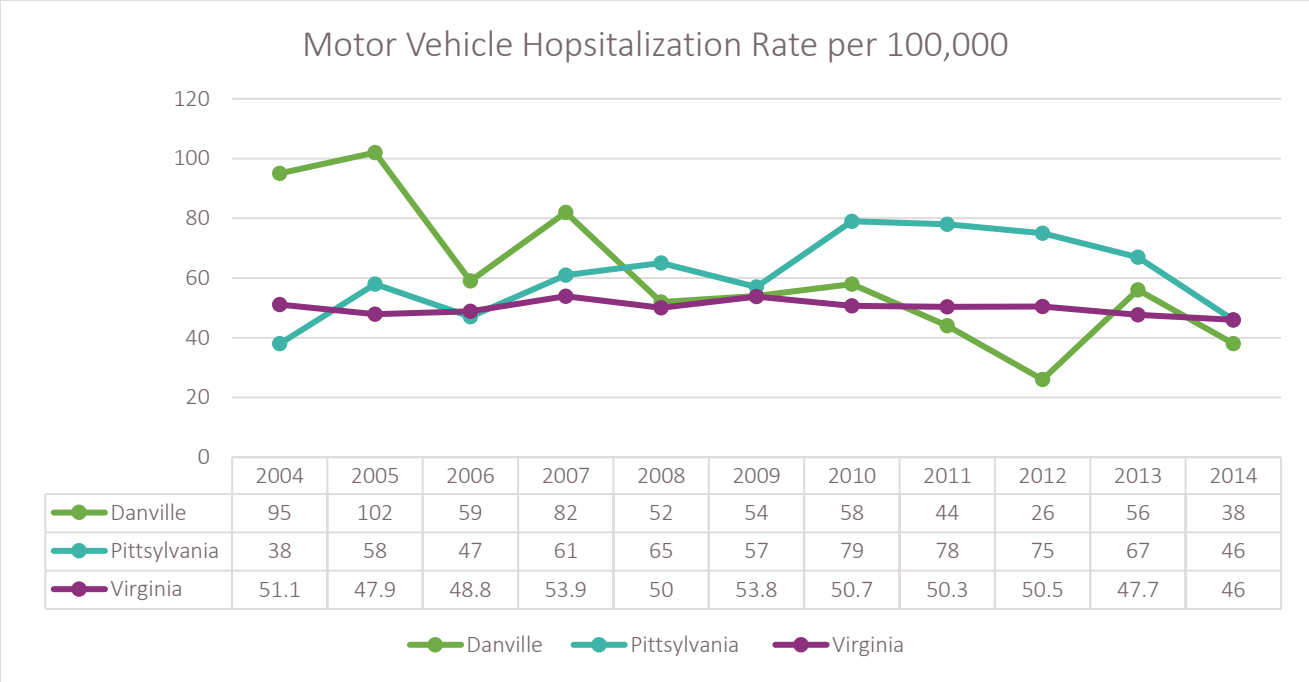


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pittsylvania - Danville Health District	10	19	20	12	11	20	12	14	18	20	11
Virginia	11.5	12.3	12	12	13.2	13.1	13.1	13.8	13.9	13.8	14

Motor Vehicle Hospitalizations and Deaths

Motor vehicle traffic injury hospitalization is defined as an inpatient, acute care hospitalization discharge for a Virginia resident where the primary diagnosis was injury related to a motor vehicle traffic injury involving occupants, motorcyclists, pedestrians, bicyclist or others operating or being injured by someone operating a motor vehicle[ccxxiv].

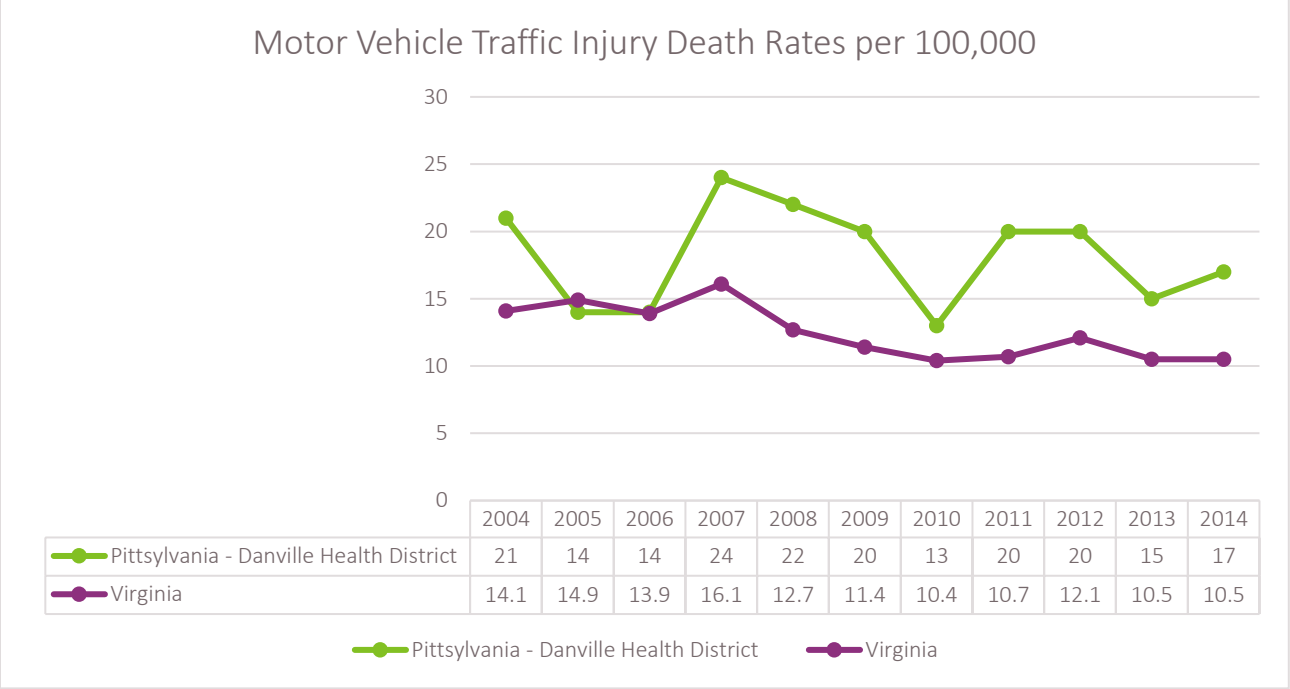
Over the course of the eleven years of data below the City of Danville went from having a significantly higher motor vehicle accident rate of 95 in 2004 to having one lower than the state's rate in 2014 (38). The motor vehicle accident rate for the city began its decline in 2005 when it reached a rate of 102, which was 2.13 times greater than the state's rate. Pittsylvania County's motor vehicle hospitalization rates started off lower than the state's rates, but became higher after 2007. The highest hospitalization rate for the county occurred in 2010 with a rate of 79[ccxxv].



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	95	102	59	82	52	54	58	44	26	56	38
Pittsylvania	38	58	47	61	65	57	79	78	75	67	46
Virginia	51.1	47.9	48.8	53.9	50	53.8	50.7	50.3	50.5	47.7	46

Motor vehicle deaths are defined as a Virginia resident death case where the underlying cause of death was related to a motor vehicle traffic injury involving occupants, motorcyclists, pedestrians, bicyclists or others pertain, or being injured by someone operating a motor vehicle.

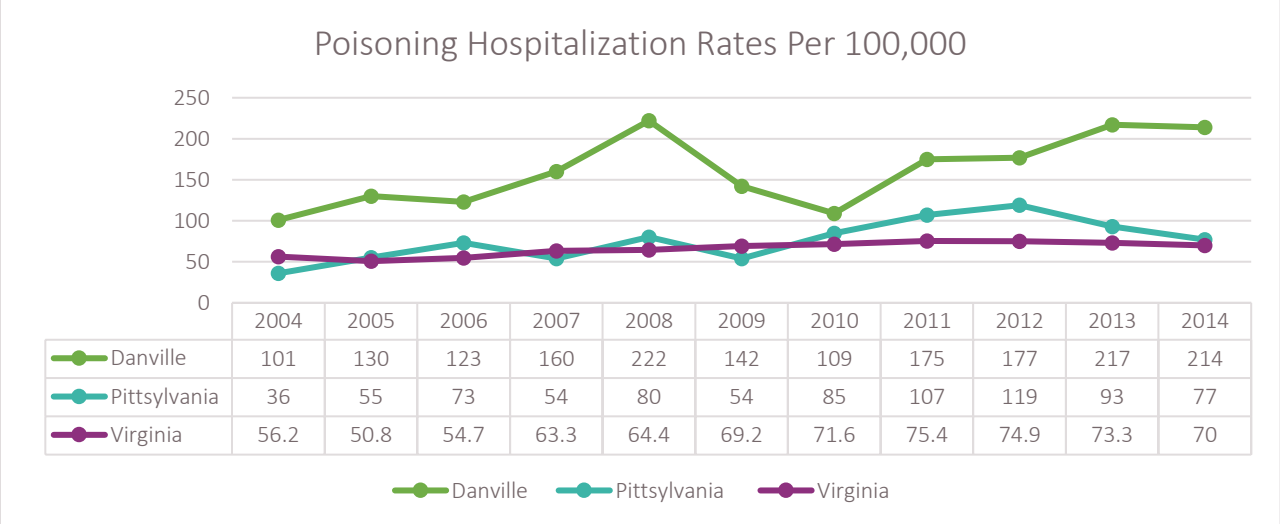
The Pittsylvania – Danville Health District has predominantly had higher rates of motor vehicle accident deaths than the state of Virginia. The exception to this was the year 2005 when the health district had a rate of 14 compared to the state's rate of 14.9. The highest motor vehicle death rate experienced by the health district came in 2007 with a rate of 24, which was 1.49 times greater than the state rate.



Poisoning Hospitalizations and Deaths

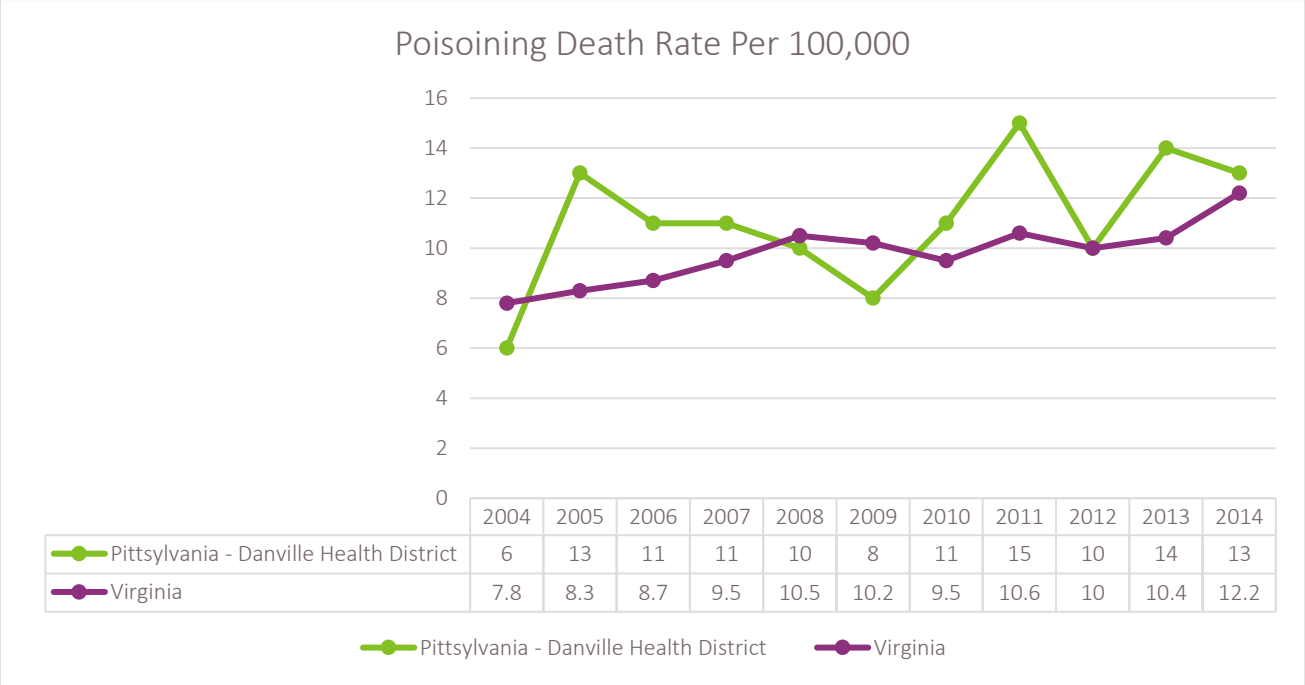
"Poisoning injury hospitalizations are defined as an inpatient, acute care hospitalization discharge of a Virginia resident where the primary diagnosis was injury – related to a drug or non-drug poisoning of any intent category.[ccxxvi]"

From 2004 to 2014, Danville had the highest poisoning hospitalization rates between the three localities. The city saw its highest poisoning hospitalization rate in 2008 when it reached 222. This rate was 3.5 times greater than the state rate. Pittsylvania County's highest rate was in 2012 with a rate of 119, which was 1.6 times greater than the state rate. All three localities saw an increase between their 2004 and 2014 rates.



Poisoning deaths are defined as a Virginia resident death case where the underlying cause of death was related to a drug- or no-drug poisoning of any intent category.

The Pittsylvania – Danville Health District poisoning death rates has seen a series of increases and declines over the past eleven years, which drive rates over and below the state rate. The highest poisoning death rate for the health district was seen in 2011 when it was 15. Its lowest death rate was in 2004 when the rate was 6. Both the health district and the state saw an increase from their 2004 rates (6 and 7.8 respectively) to their rates in 2014 (13 and 12.2)[ccxxvii].

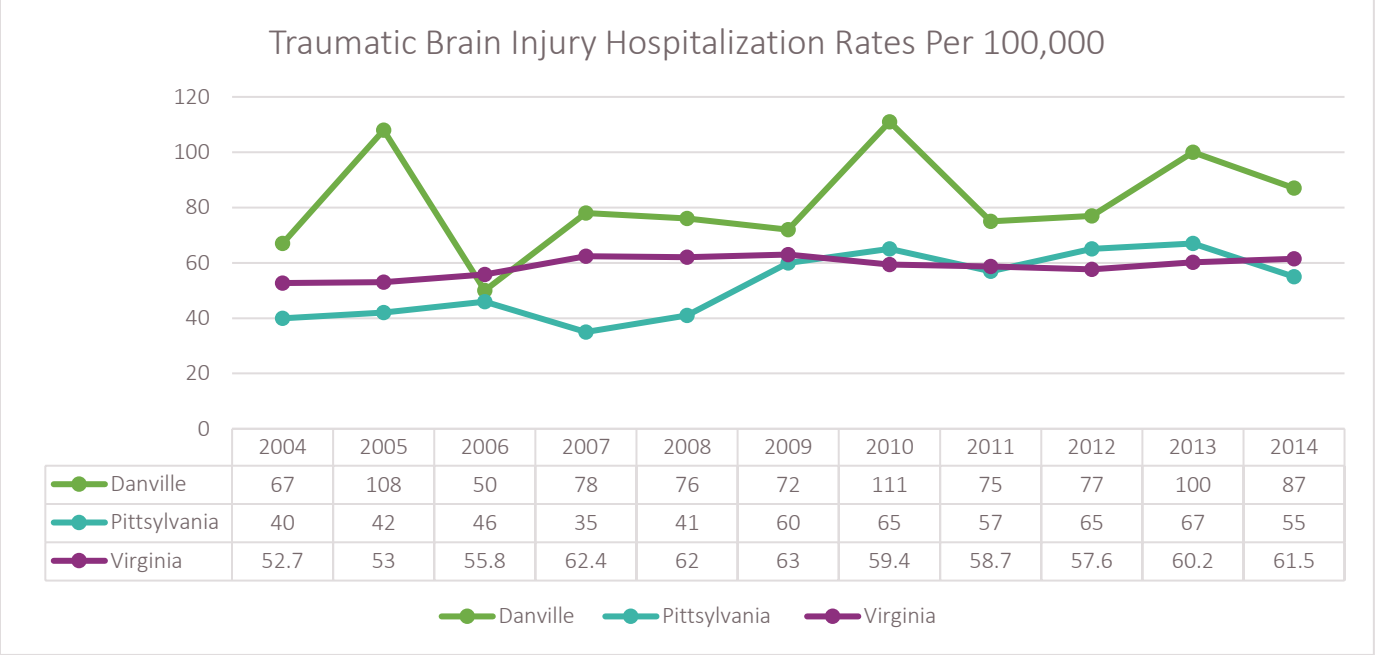


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pittsylvania - Danville Health District	6	13	11	11	10	8	11	15	10	14	13
Virginia	7.8	8.3	8.7	9.5	10.5	10.2	9.5	10.6	10	10.4	12.2

Traumatic brain injury hospitalizations and deaths

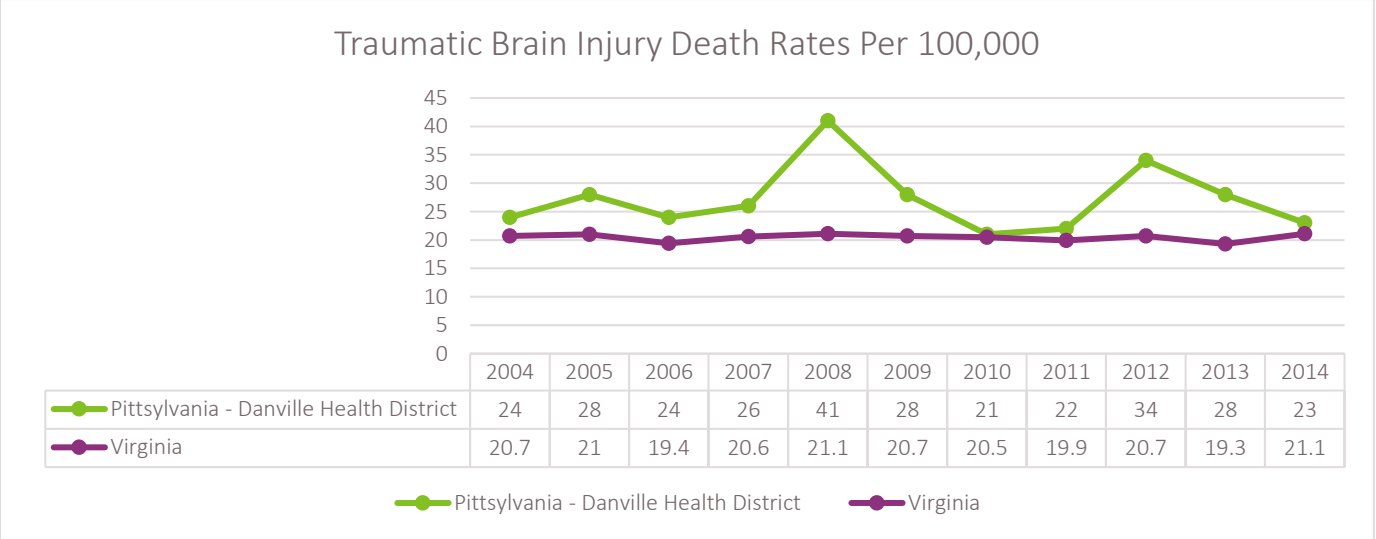
"Traumatic brain injury hospitalizations are defined as an inpatient, acute care hospitalization discharge of a Virginia resident where the primary diagnosis was and injury that was determined to be a result of a traumatic brain injury.[ccxxviii]" A traumatic brain injury is an injury to brain that disrupts its normal function[ccxxix].

From 2004 to 2014, the City of Danville experiences a higher rate of traumatic brain injury (TBI) hospitalization rates than the state and the county. In 2006, the city experienced its lowest hospitalization rate at 50. The rate did drop below the state's but was still higher than the county's. The city's highest rate was recorded in 2010 with a rate of 111. Pittsylvania County's rate was consistently below the state's rate until 2010 when it began to weave its way across the state's rate line. The county saw its highest rate in 2013 with a rate of 67 per 100,000 and its lowest in 2004 with a rate of 40[ccxxx].



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	67	108	50	78	76	72	111	75	77	100	87
Pittsylvania	40	42	46	35	41	60	65	57	65	67	55
Virginia	52.7	53	55.8	62.4	62	63	59.4	58.7	57.6	60.2	61.5

From 2004 to 2014 the Pittsylvania – Danville Health District had a Traumatic Brain Injury (TBI) death rate[29] that was higher than the state rate. The health district saw its highest TBI death rate in 2008 with a rate of 41, which was almost double the state's rate of 21.1. The health district's lowest TBI death rate occurred in 2010 with a rate of 21, compared to the state's rate of 20.5.



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pittsylvania - Danville Health District	24	28	24	26	41	28	21	22	34	28	23
Virginia	20.7	21	19.4	20.6	21.1	20.7	20.5	19.9	20.7	19.3	21.1

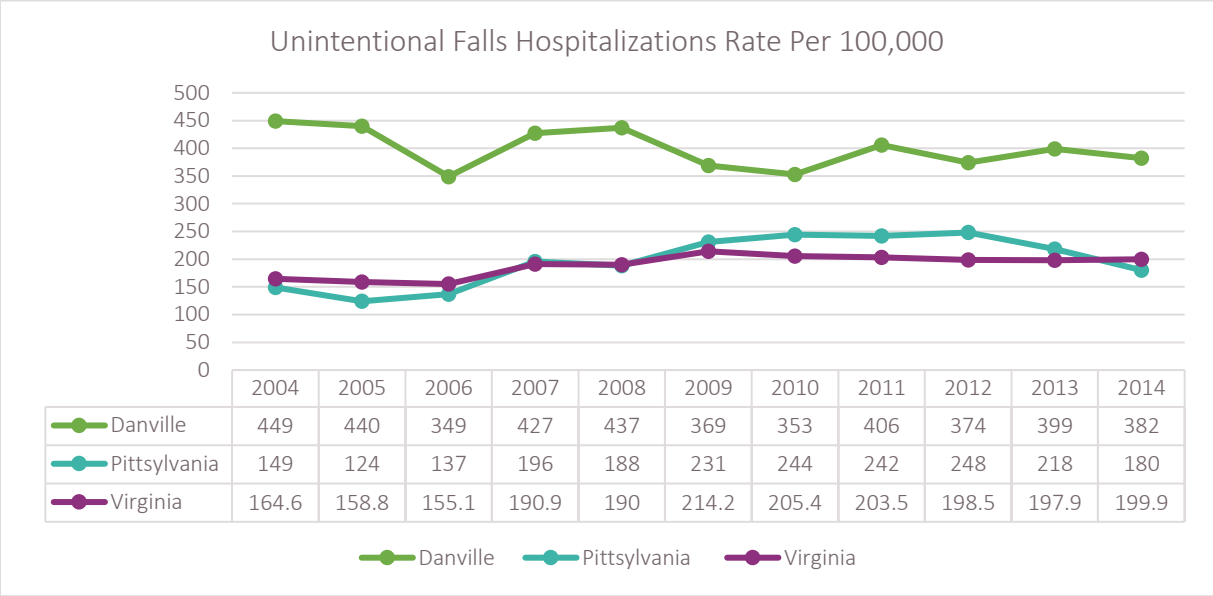
Unintentional Falls Hospitalization and Death Rate

Unintentional falls hospitalizations are defined as an inpatient, acute care hospitalization discharge of a Virginia resident where the primary diagnosis was injury-related to unintentional falls of any type. In the

[29] These reflect injury deaths of any intent (i.e. unintentional, homicide, suicide, undetermined or other) that were determined to be a result of a traumatic brain injury.

United States, 2.8 million seniors (65+) are treated each year in the emergency department for fall injuries.[ccxxxi]

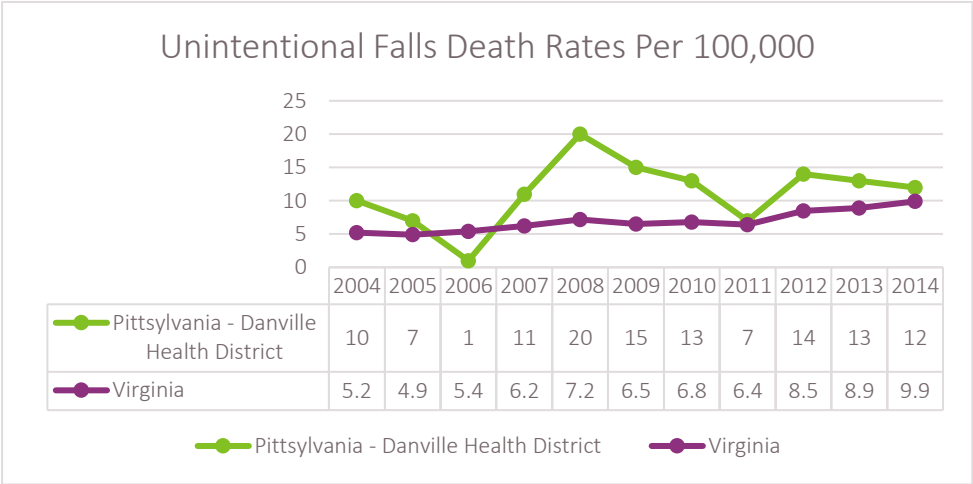
From 2004 to 2014, Danville experienced significantly higher hospitalization rates for unintentional falls. The city's highest rate occurred in 2004 with a rate of 449 which was 2.728 times greater than the state rate. The city's lowest rate occurred in 2006 when it was 349. However, this was still 2.25 times greater than the state rate. Pittsylvania County rates have been more in line with the state's rate throughout the years, with the trend lines intersecting at multiple points. The highest rate for the county occurred in 2012 with a rate of 248 compared to the state's rate of 198.5. Its lowest rate occurred in 2005 with a rate of 124 compared to the state's rate of 158.8



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Danville	449	440	349	427	437	369	353	406	374	399	382
Pittsylvania	149	124	137	196	188	231	244	242	248	218	180
Virginia	164.6	158.8	155.1	190.9	190	214.2	205.4	203.5	198.5	197.9	199.9

Unintentional fall deaths are defined as a Virginia resident death case where the underlying cause of death was the result of unintentional falls of any type[ccxxxii].

From 2004 to 2014 the Pittsylvania – Danville Health District had a higher unintentional falls death rate for all but one year, 2006. The unintentional falls death rate for 2006 of 1, compared to the state's rate of 5.4. The highest unintentional falls death rate for the health district occurred in 2008 with a rate of 20 which was 2.78 times greater than the state rate.



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pittsylvania - Danville Health District	10	7	1	11	20	15	13	7	14	13	12
Virginia	5.2	4.9	5.4	6.2	7.2	6.5	6.8	6.4	8.5	8.9	9.9

Drinking Water and Lead

The Virginia Department of Health is responsible for testing the state's drinking water for unsafe lead levels. Virginia has based its regulations around lead and copper drinking levels in water on the federal Safe Drinking Water Act and the Environmental Protection Agency's Lead and Copper Rule. Lead level results are tests from the consumers' tap and must have a concentration of more than 15 micrograms per liter to spark corrective action. If this occurs, the water system is required to provide treatments to reduce lead levels. In addition, the system must undergo further and more consistent testing. Furthermore, those impacted will be informed of the elevated lead levels and what is being done to correct the issue.

Testing drinking water for lead levels is an important component of creating a healthier community. Research has shown that "children who drink water with unsafe lead levels could have delays in physical or mental development including:

- Hearing and speech
- Learning and behavior
- Slowed growth
- Damage to the brain and nervous system.[ccxxxiii]"

Of all the testing data that was available in the data portal, there have only been three cases in which the lead level reached the threshold that required corrective action.

Danville Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results in Danville. In total, zero tests met the standard for corrective action.
2/27/14	0	
7/10/15	0	
7/11/15	0	
7/12/15	3.4	
7/13/15	1.1	
7/16/15	1.1	
7/18/15	0	
7/30/15	0	
8/1/15	1.3	
8/1/15	0	
8/3/15	0	
8/4/15	0	
8/7/15	0	
8/10/15	1.5	
8/10/15	1.2	
8/10/15	1.1	
8/12/15	0	
8/14/15	0	
8/15/15	0	
8/18/15	0	

Chatham Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results in Chatham. In total, two tests met the standard for corrective action.
3/25/2013	0	
3/26/2013	0	
3/27/2013	**18.3**	
3/28/2013	0	
3/30/2013	0	
4/9/2013	0	
4/9/2013	**19.2**	
4/15/2013	0	
4/23/2013	0	
4/24/2013	0	
5/21/2013	0	
5/21/2013	2	
5/22/2013	0	
5/24/2013	0	
6/25/2013	0	
6/26/2013	5.1	
11/18/2013	0	
11/18/2013	2	
11/19/2013	0	
12/4/2013	0	
6/9/2014	0	
6/10/2014	3.2	
6/13/2014	3.6	
6/24/2015	0	

Grit Rd. Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This shows the water quality testing results for Grit Rd. In total, zero tests met the standard for corrective action.
7/10/2013	2.9	
7/11/2013	0	
7/11/2013	4.2	
7/11/2013	1.7	
7/19/2016	0	
7/19/2016	1.1	
7/19/2016	1.7	
7/19/2016	2.9	

Woodroam Water Testing Results		
Date	Lead Level Micrograms Per Liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Woodroam. In total, zero tests met the standard for corrective action.
9/24/2013	5.7	
9/24/2013	2.9	
9/24/2013	1.6	
9/28/2013	3.7	
9/28/2013	3.6	
9/23/2015	1	
9/23/2015	1.6	
9/23/2015	1.9	
9/23/2015	2.8	
9/23/2015	3.5	

Gretna Water System Testing Results		
Date	Lead Level Micrograms per Liter	Using the information provided through the Virginia Department of Health Data Portal. This shows the water quality testing results for Gretna. In total, one test met the standard for corrective action.
7/7/2014	7.6	
7/8/2014	**17.2**	

58 West Pittsylvania County Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for 58 West Pittsylvania County. In total, zero tests met the standard for corrective action.
7/29/2014	11	
7/29/2014	0	

Hurt Water Testing Results		
Date	Lead Level Micrograms per Liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Hurt. In total, zero tests met the standard for corrective action.
8/7/2014	8.1	
8/7/2014	1.7	

Vista Pointe Landing Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Vista Pointe Landing. In total, zero tests met the standard for corrective action.
7/22/2014	1.9	
7/22/2014	6.5	
7/30/2014	0	

Wayside Acres Subdivision 1 Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Wayside Acres Subdivision 1. In total, zero tests met the standard for corrective action.
7/22/2014	4.6	
7/22/2014	1.8	

Wayside Acres Subdivision 2 Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Wayside Acres Subdivision 2. In total, zero tests met the standard for corrective action.
7/22/2014	3	
7/22/2014	1.1	
7/22/2014	1.7	

Bevrich Mobile Home Park Water Testing Results		
Date	Lead Level Micrograms Per Liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Bevrich Mobile Home Park. In total, zero tests met the standard for corrective action.
9/30/2014	2.7	
9/30/2014	0	

Robin Court Subdivision Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Robin Court Subdivision. In total, zero tests met the standard for corrective action.
7/22/2014	1.3	

Route 29 North Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Route 29 North. In total, zero tests met the standard for corrective action.
7/23/2014	0	

Ringgold Industrial Park Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. This table shows the water quality testing results for Ringgold Industrial Park. In total, zero tests met the standard for corrective action.
7/24/2014	0	

Crestview Trailer Court Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. In total, zero tests met the standard for corrective action.
6/26/2015	7.5	
6/26/2015	4.7	
6/26/2015	4.2	
6/26/2015	2.1	

Powells Trailer Court Water Testing Results		
Date	Lead Level Micrograms per liter	Using the information provided through the Virginia Department of Health Data Portal. In total, zero tests met the standard for corrective action.
8/5/2015	0	

Tightsqueeze Water Testing Results		
Date	Lead Level Micrograms per Liter	Using the information provided through the Virginia Department of Health Data Portal. In total, zero tests met the standard for corrective action.
9/10/2015	0	
9/10/2015	1.5	

The Health Collaborative's Approach

Historically, health programs have focused on individual behavior, assuming that if you teach people what will make them healthy, they will find a way to do it. Unfortunately, being healthy is about much more than our individual choices. Where you live matters – you simply cannot make healthy choices if healthy options are not readily available to you. Fifty percent of our health outcomes are determined by access to physical, social, and economic opportunities. Health starts is our homes, schools, workplaces, neighborhoods, and communities. In order to have a healthy Dan River Region, all residents must have easy access to social and economic opportunities as well as healthy food, physical activity and quality healthcare.

Over the past few decades, many cities and counties across the country have unintentionally built communities where healthy choices are unavailable. Unfortunately, these decisions have contributed to a dramatic increase in rates of many chronic diseases and poor health, which affect low income and minority populations at higher rates. The Dan River Region is not immune to this trend, it has taken years to build health out of our daily lives. And it will take years and considerable effort, commitment and investment on behalf on many partners, businesses and nonprofits, governments and schools and community organizations, to reverse this. Decisions made at every level can influence our health behaviors.

In the Dan River Region, there is great work already happening, and The Health Collaborative is supporting this work and building upon it to make it more sustainable. We aim to take an integrated approach, complementing existing initiatives with policy, systems and environmental changes. In order for our region to thrive, we must continue to create environments where current and future residents have access to opportunities to live heathy. This includes neighborhoods and communities where all residents can safely walk, bike and play, purchase affordable healthy food and access medical care within close proximity to where they live. It also includes neighborhoods and communities that support positive social and economic environments, and addresses the root causes of poor health, including unemployment, housing, transportation and food insecurity. In taking the first step in understanding the root causes and addressing the social determinants of health, The Health Collaborative completed its first regional health equity report.

Community Engagement Findings: Full Results

Community Engagement Strategies by Location			
	Community Health Survey	Key Informant Interviews	Focus Groups
Danville	●	●	●
Pittsylvania County	●	●	●
Caswell County		●	●

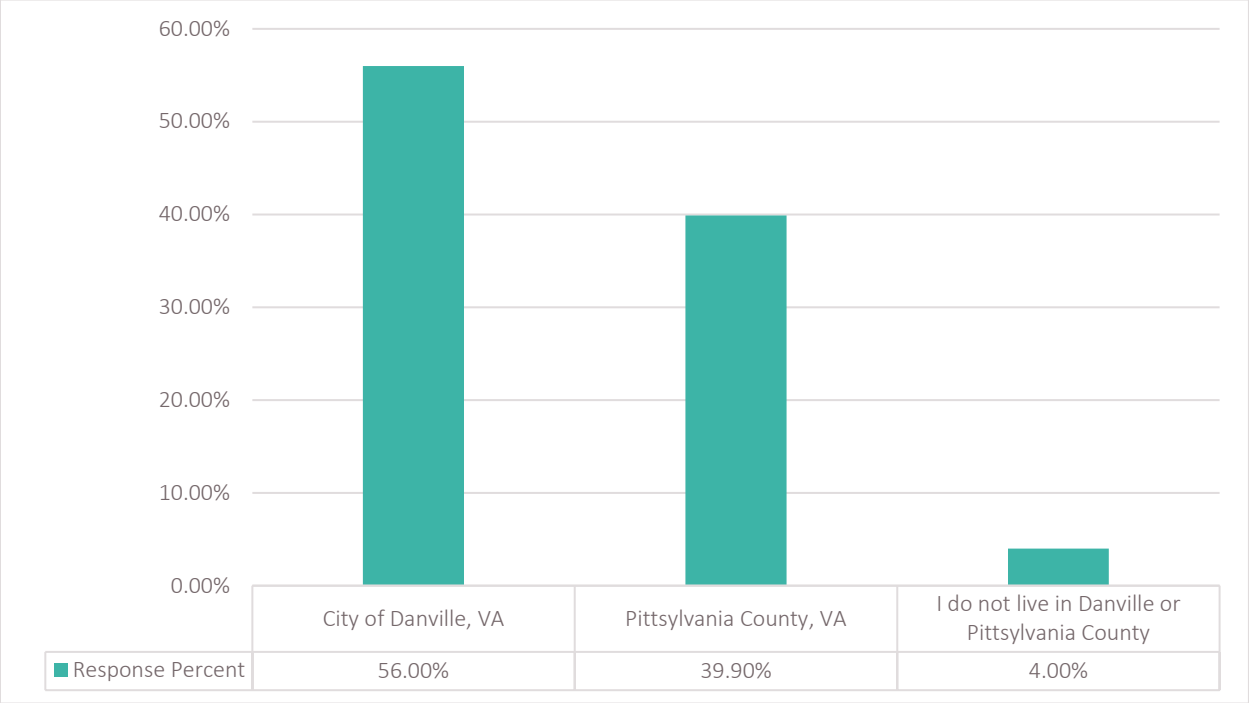
The community engagement process for the community health needs assessment and health equity report consisted of a community health survey for Danville and Pittsylvania County, key informant interviews and focus groups. The key informant interviews and the focus groups took place throughout the Dan River Region including Caswell County, North Carolina. Each component of the engagement process built upon previous steps. Therefore, common themes and perceptions held among survey participants shaped key informant interviews, which then impacted the development of focus group questions. Furthermore, the questions and survey were developed to be a companion piece to the Caswell County Community Health Assessment and the Virginia and North Carolina Behavioral Risk Factor Surveillance System (BRFSS). The community engagement process would not have been successful without the help of key partners including:

- Danville Pittsylvania County Chamber of Commerce
- City of Danville Parks and Recreation
- God's Storehouse
- Middle Border Forward
- Pittsylvania County Library System
- Danville Public Library
- Right Touch Christian Church
- East New Hope Missionary Baptist Church
- Danville Public Schools nutrition staff
- Caswell County Health Department
- Pittsylvania County Parks and Recreation
- The Remnant Church of Power
- Pittsylvania County Community Action
- Danville – Pittsylvania Community Services The Health Collaborative
- Danville Register and Bee (News story promoting survey)
- WSET (ABC) 13 (News story promoting survey)

Danville - Pittsylvania County Community Health Survey

The Danville - Pittsylvania County Community Health Survey was the first step in the community engagement process. The survey opened on December 1st 2016 and was available through January 15th 2017. The survey was available in two forms, the first was an online survey via Survey Monkey. The second was in paper form. Paper copies were available for pick up and drop off at Middle Border Forward, Danville Public Library and all four Pittsylvania Public Library branches. Furthermore, Right Touch Christian Church, East New Hope Missionary Baptist Church and Remnant Church of Power provided surveys to their congregation. The Danville Public Schools nutrition staff and volunteers at God's Storehouse were also provided surveys. In addition, God's Storehouse allowed for the survey to be administered to their customers over a 2-day period. The survey had 401 total responses. All perceptions, votes and rankings are reflective of only the perceptions held by respondents.

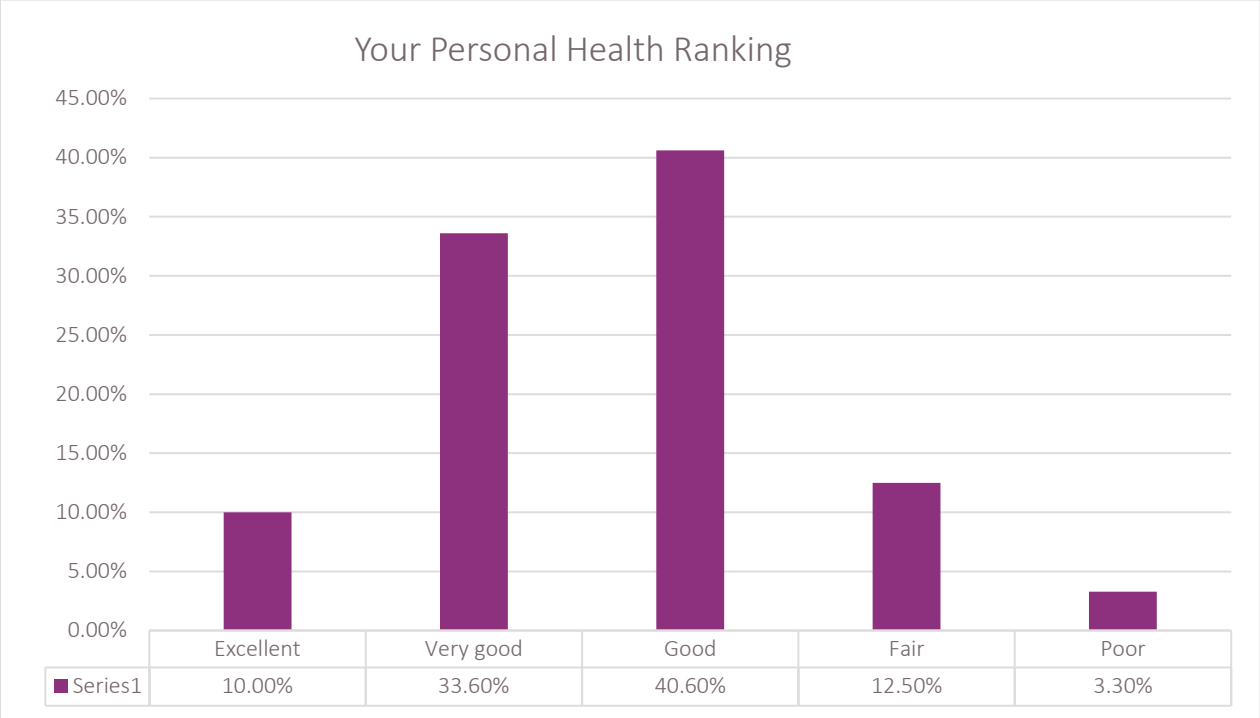
Question 1: Where do you live? (Answered question 398, Skipped 3)



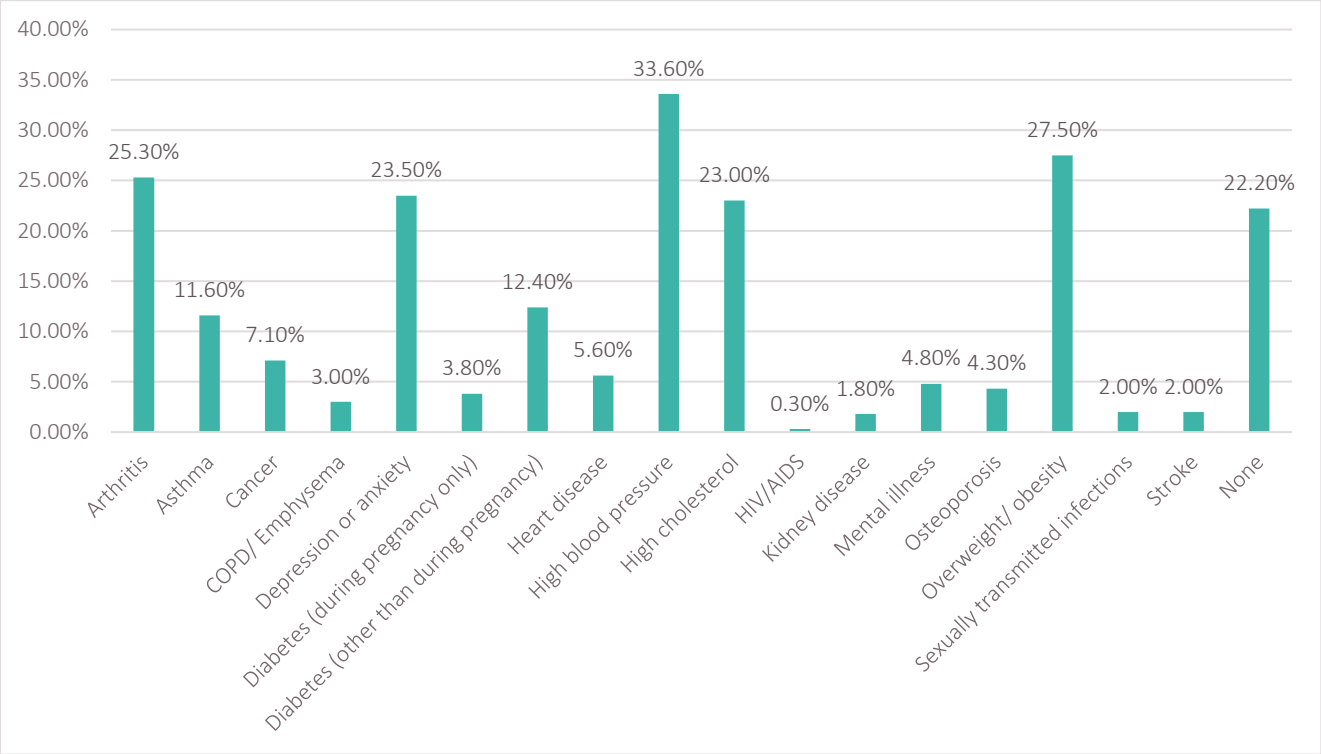
Question 2: Zip code where you live? (Answered 387, Skipped 14)

- 24054 (1)
- 24069 (6)
- 24112 (2)
- 24139 (2)
- 24161 (1)
- 24520 (1)
- 24527 (11)
- 24529 (1)
- 24530(3)
- 24531 (17)
- 24540 (127)
- 24541 (147)
- 24542 (1)
- 24543 (1)
- 24547 (1)
- 24549 (17)
- 24557 (9)
- 24563 (1)
- 24566 (4)
- 24569 (1)
- 24586 (17)
- 24592 (1)
- 24594 (3)
- 24597 (1)
- 25541 (1)
- 27048 (1)
- 27212 (1)
- 27305 (1)
- 27315 (1)
- 23720 (1)
- 27379 (2)
- 27403 (1)
- 27410 (1)

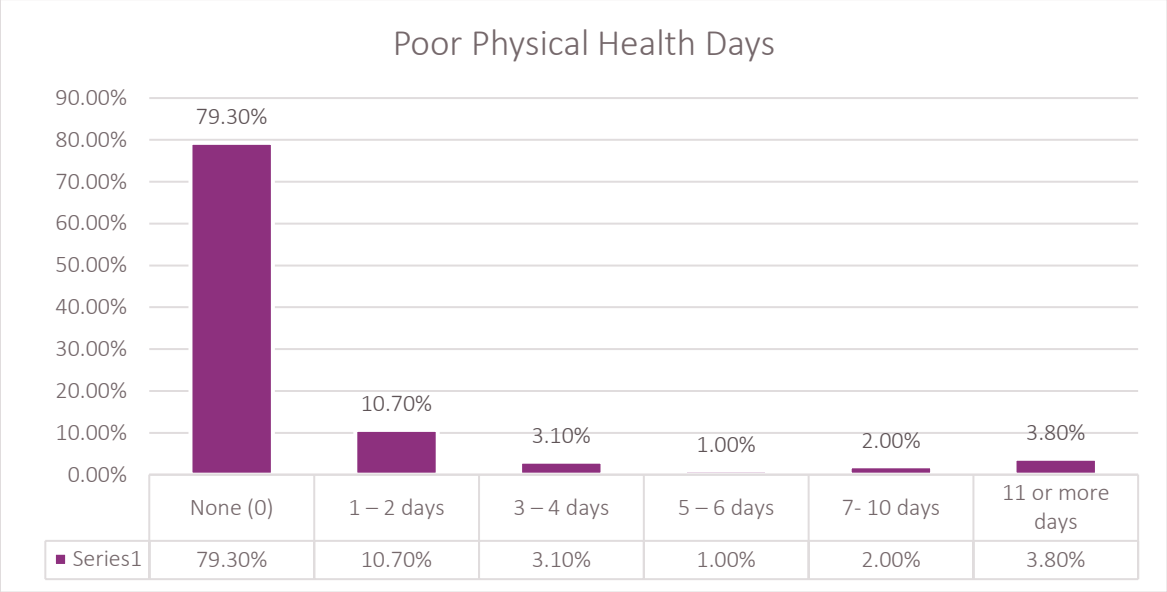
Question 3: Would you say your health is excellent, very good, good, fair, or poor (Answered 399, Skipped 2)



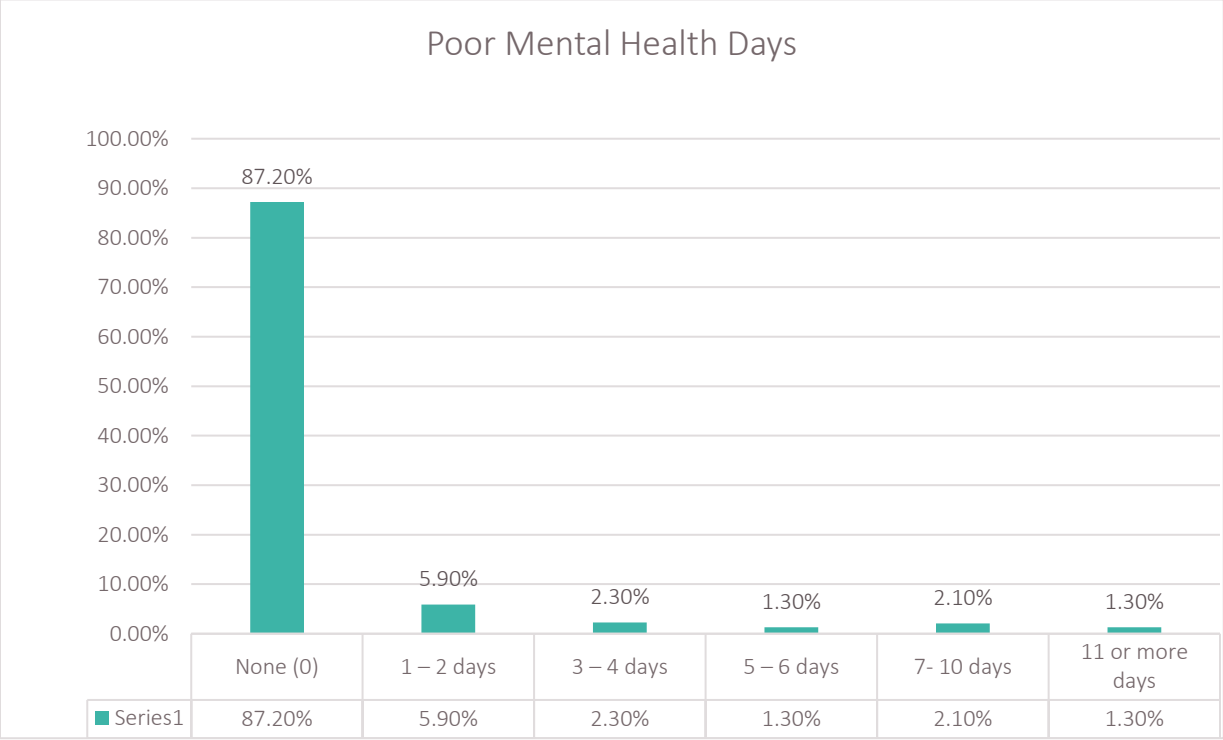
Question 4: Have you ever been told by a healthcare provider that you have/ had any of the following conditions or health risks? (Check ALL that apply) (Answered 396, Skipped 5)



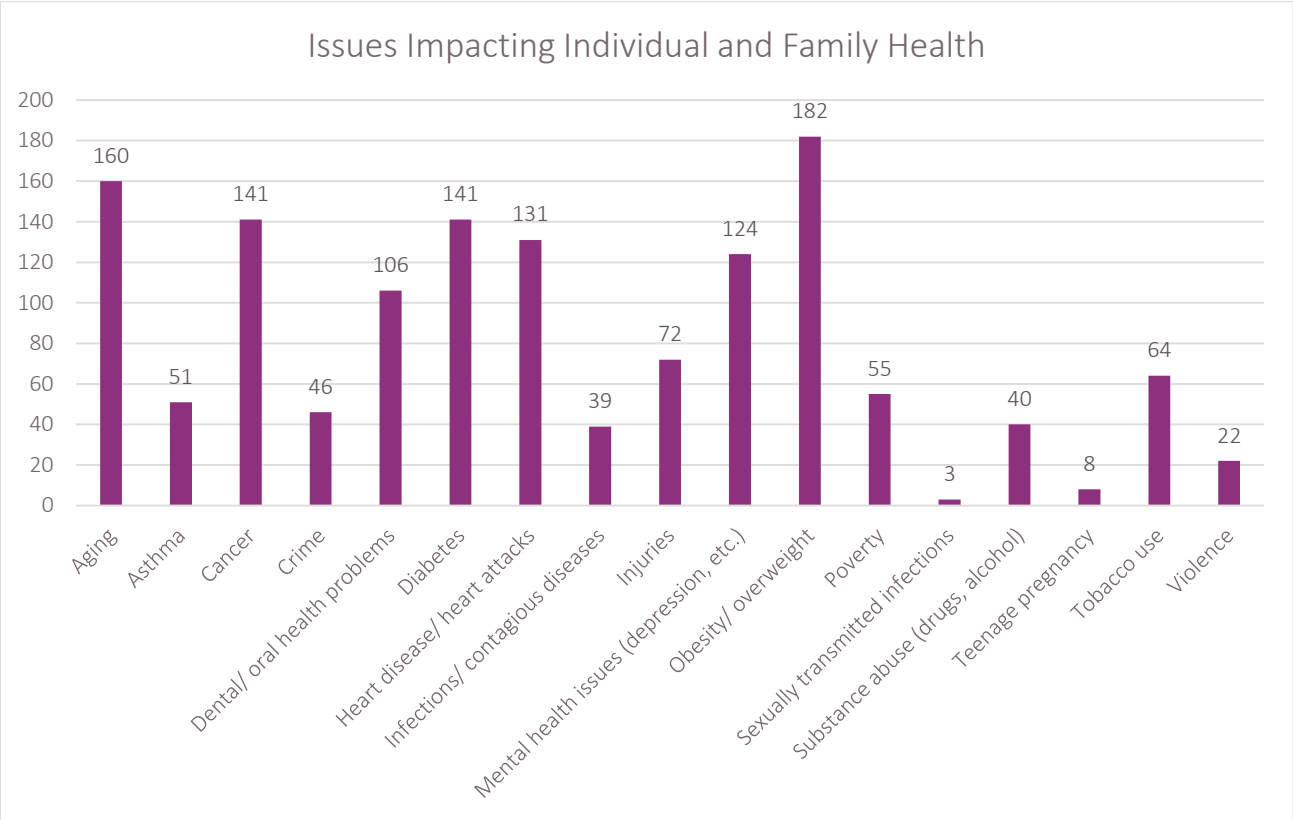
Question 5: How many days in the past month were you not able to work or do daily activities because of poor physical health? (Answered 392, Skipped 9)



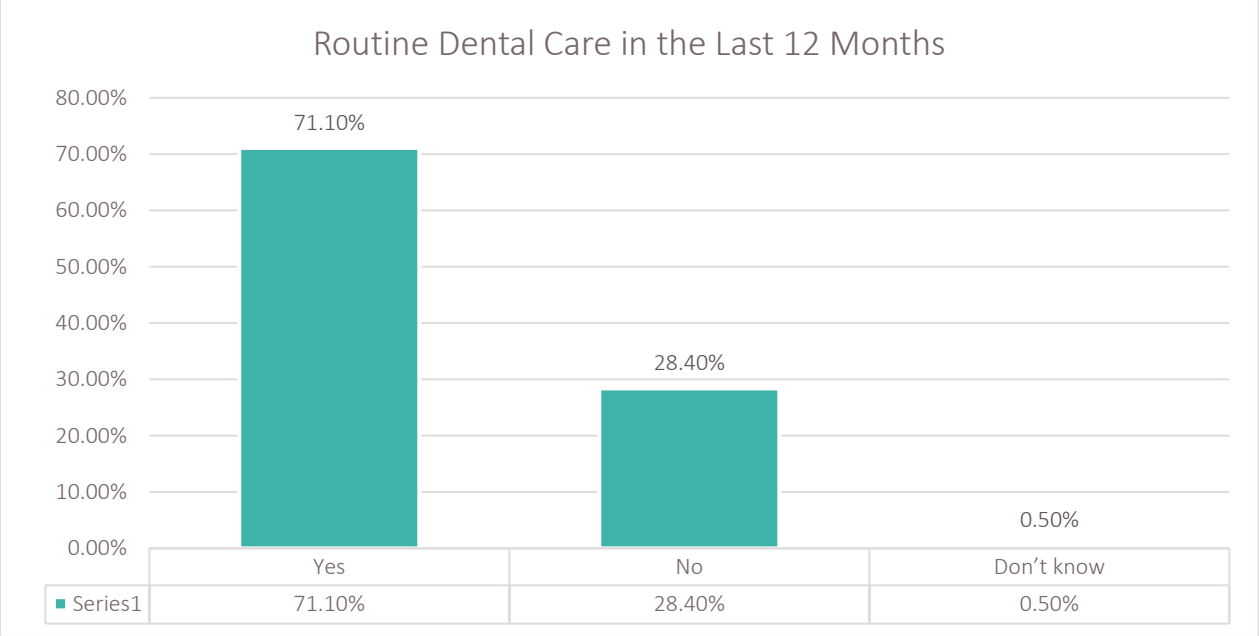
Question 6: How many days in the past month were you not able to work or do daily activities because of poor mental health? (Answered 390, Skipped 11)



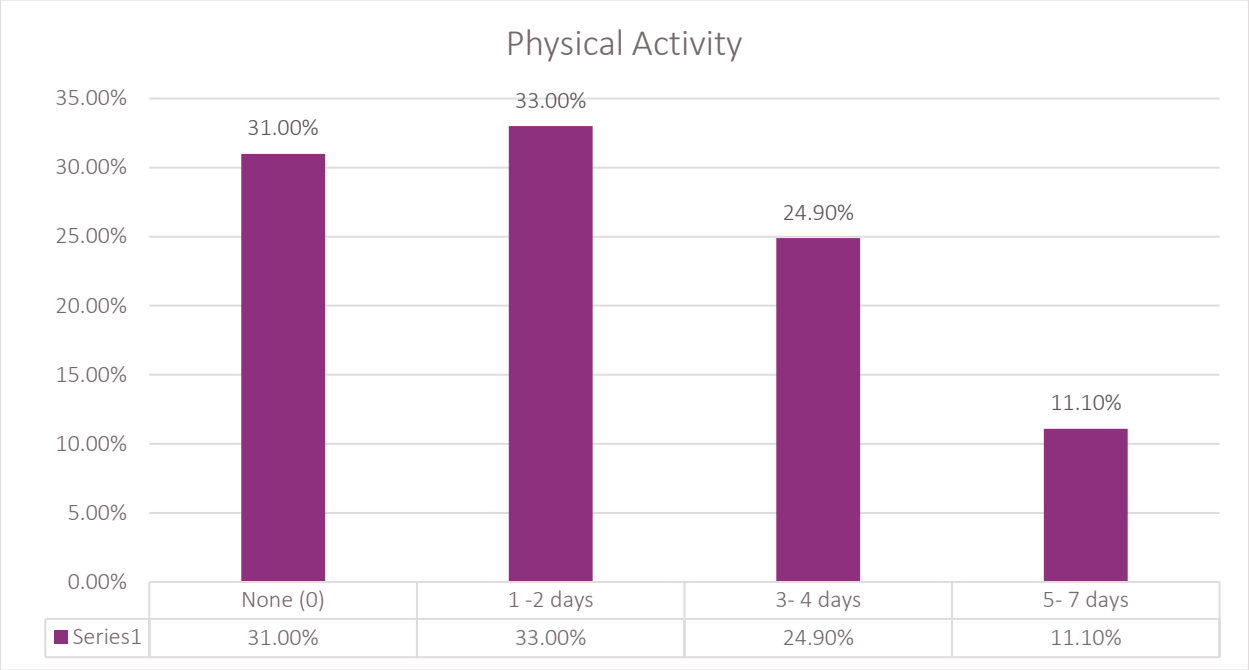
Question 7: Choose the top 5 health issues that have the greatest impact on you and your family (Make only 5 checks) (Answered 378, Skipped 23)



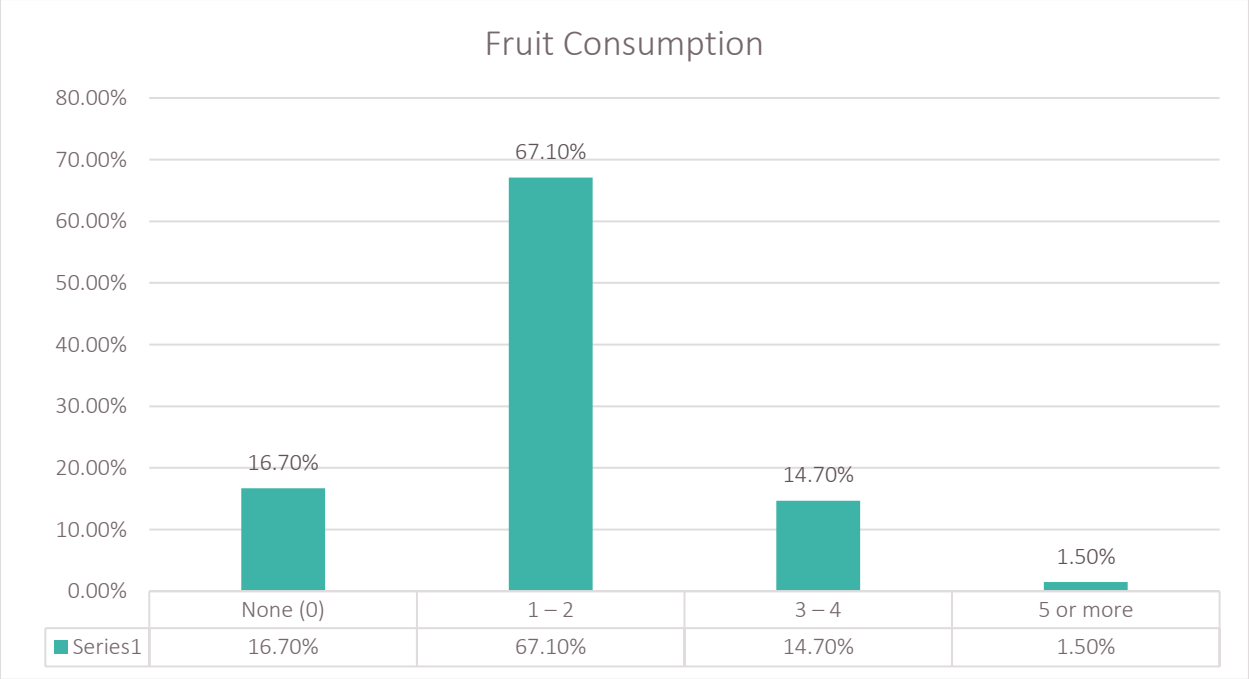
Question 8: Have you seen a dentist in the last 12 months for routine care (Cleaning, X-rays, etc.)? (Answered 398, Skipped 3)



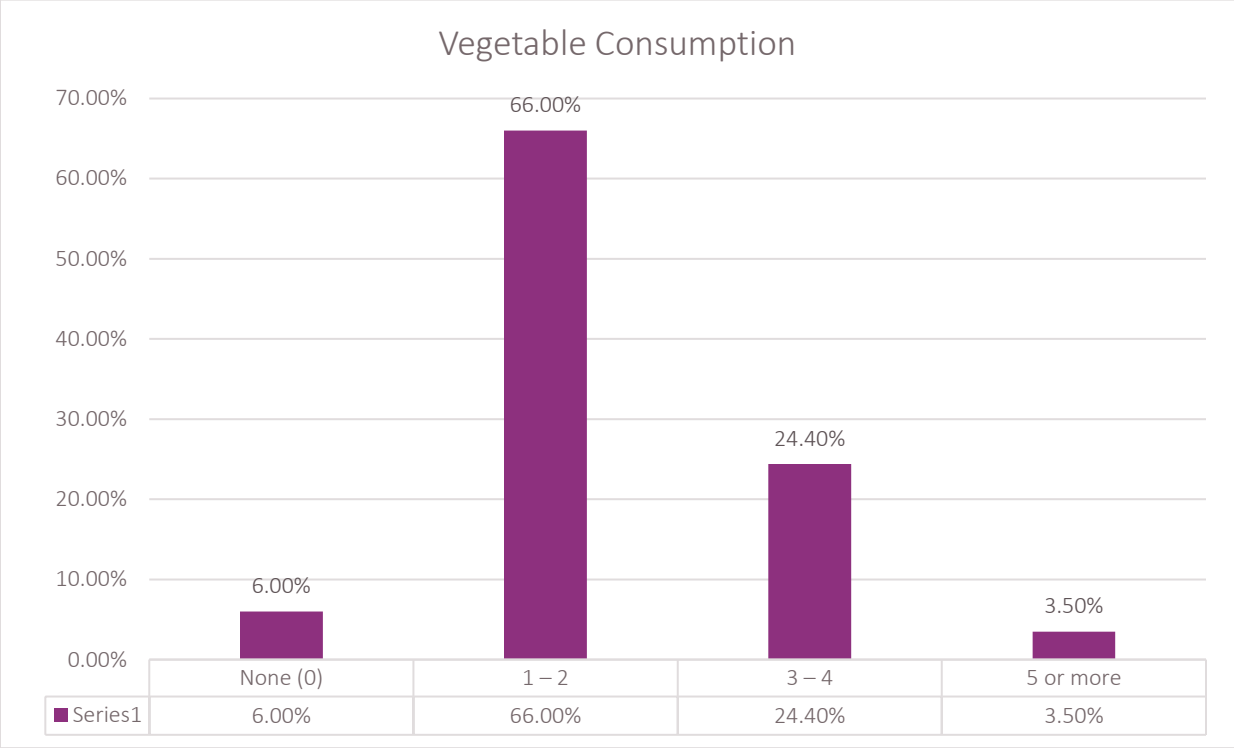
Question 9: How many days do you exercise for 30 minutes or more in a typical week? (Answered 397, Skipped 4)



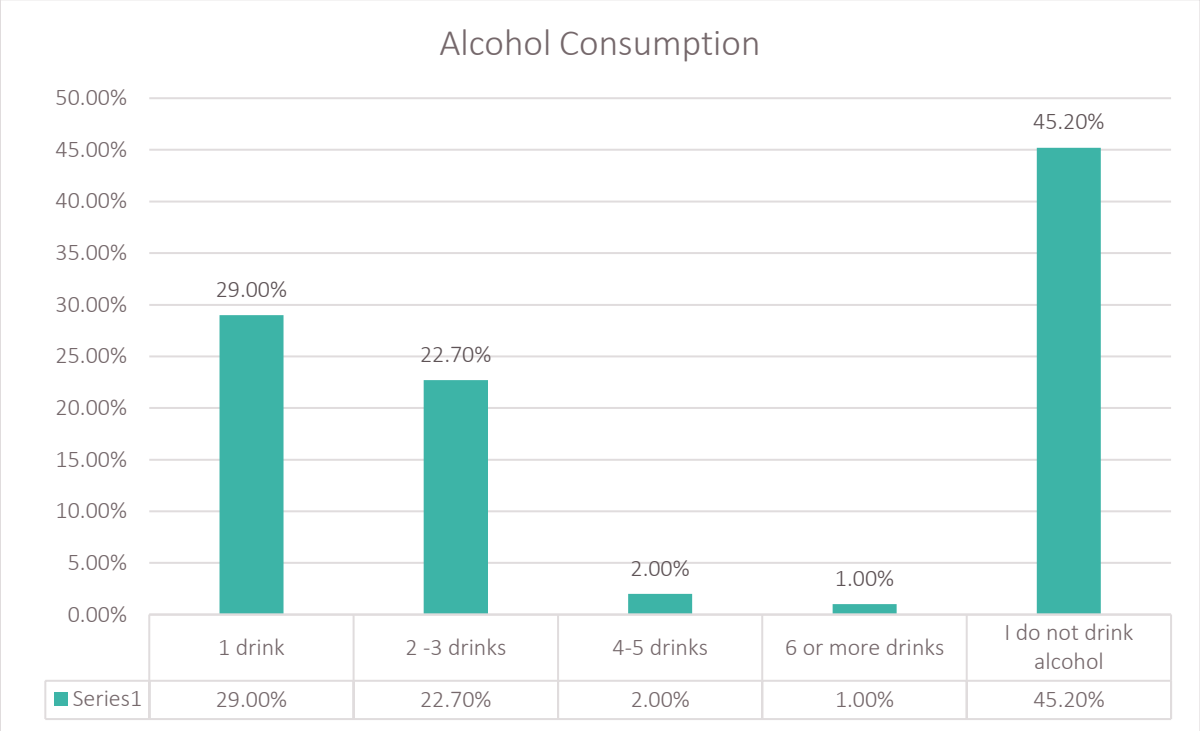
Question 10: On average, how many servings of fruit do you eat each day? (Answered 395, Skipped 6)



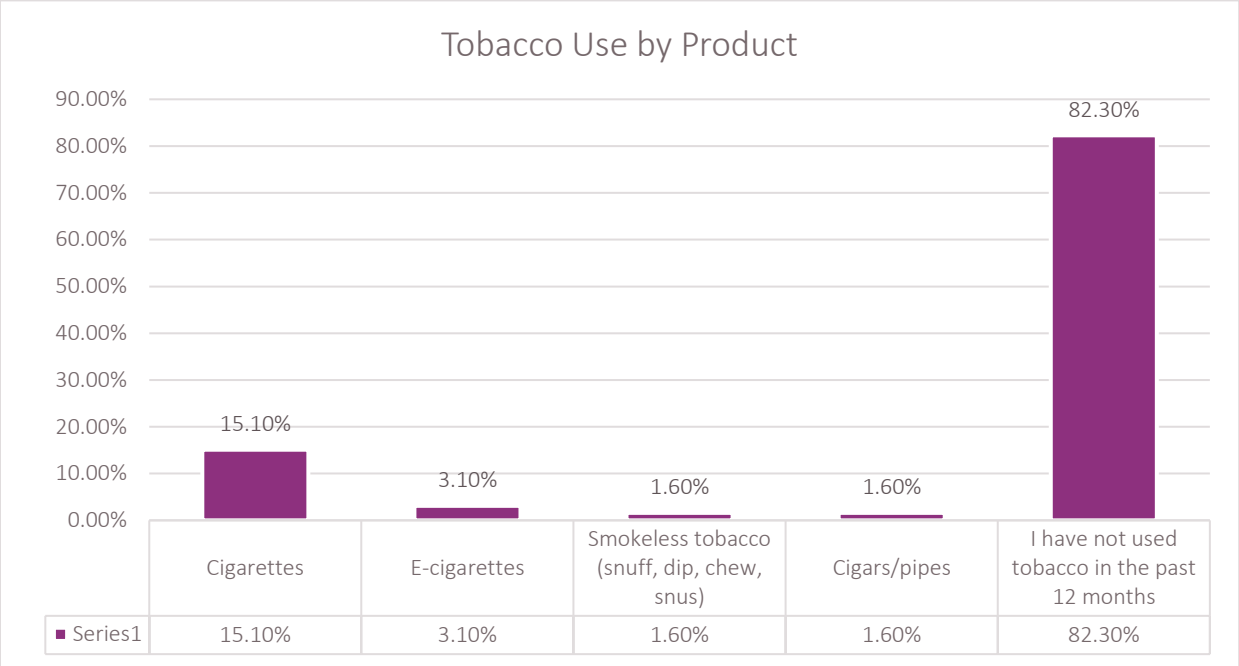
Question 11: On average, how many servings of vegetables do you eat each day? (Answered 397, Skipped 4)



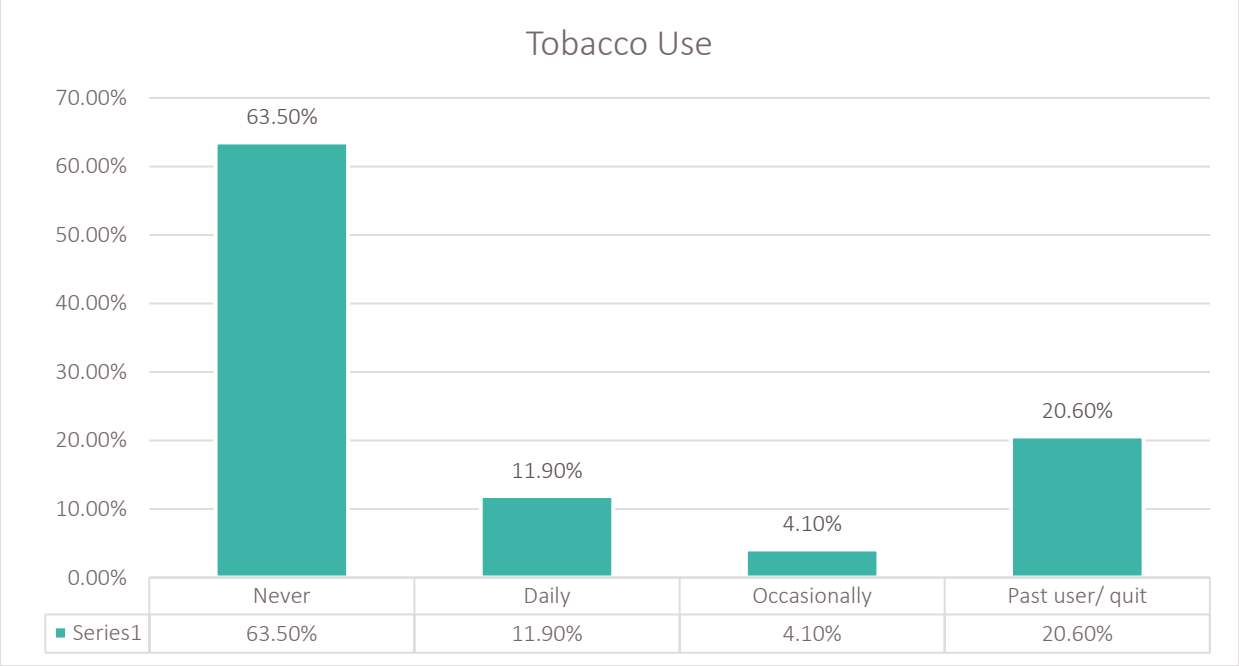
Question 12: On days when you drink alcohol, about how many drinks do you consume on average (1 drink = one can, glass, or shot)? (Answered 396, Skipped 5)



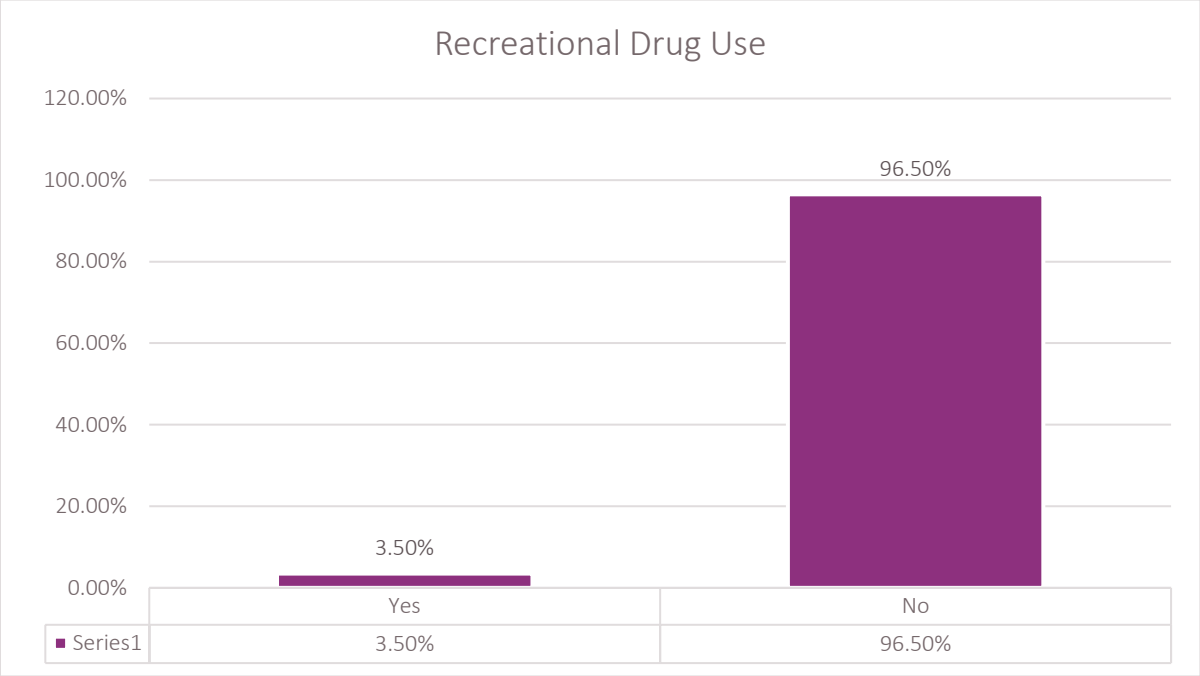
Question 13: In the past 12 months have you used any of the following tobacco products? (Check ALL that apply) (Answered 385, Skipped 16)



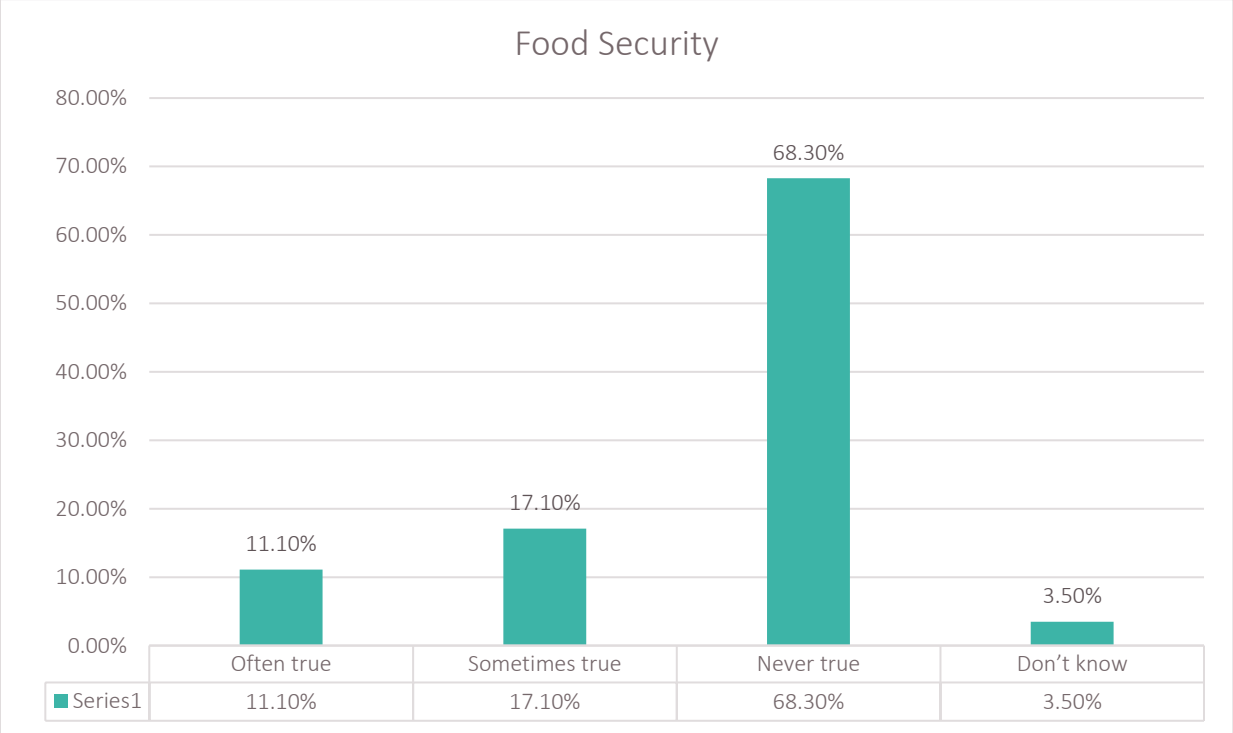
Question 14: Which of the following best describes your tobacco use? (Answered 394, Skipped 7)



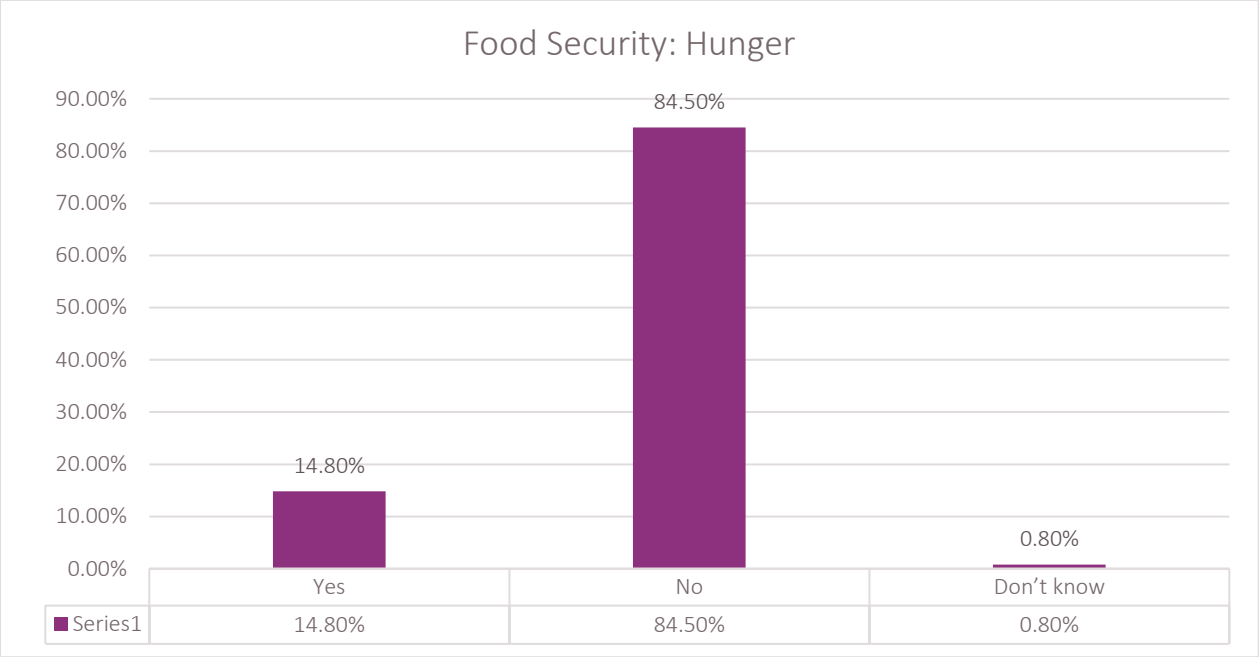
Question 15: In the past 12 months, have you used street or recreational drugs? (Answered 399, Skipped 2)



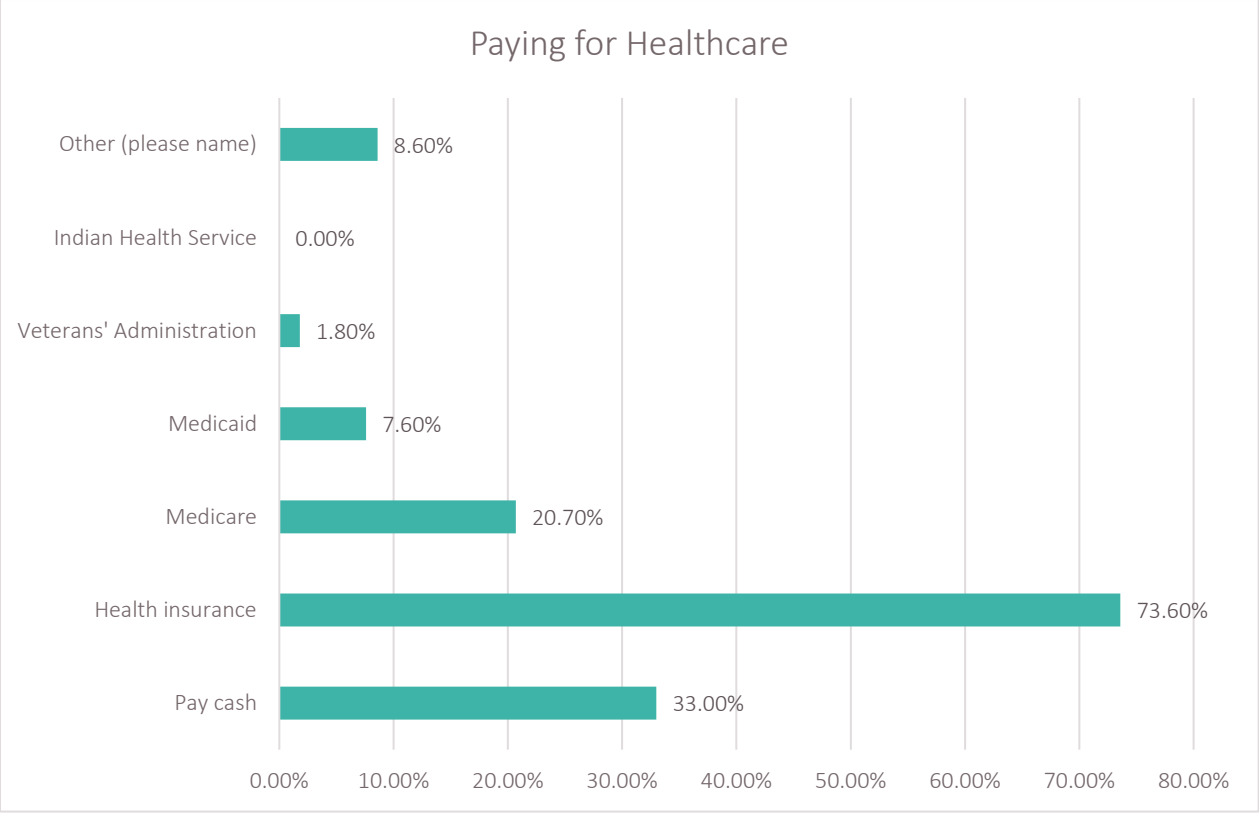
Question 16: How often was the following statement true in the past 12 months? "The food I bought just didn't last, and I didn't have money to get more." (Answered 398, Skipped 3)



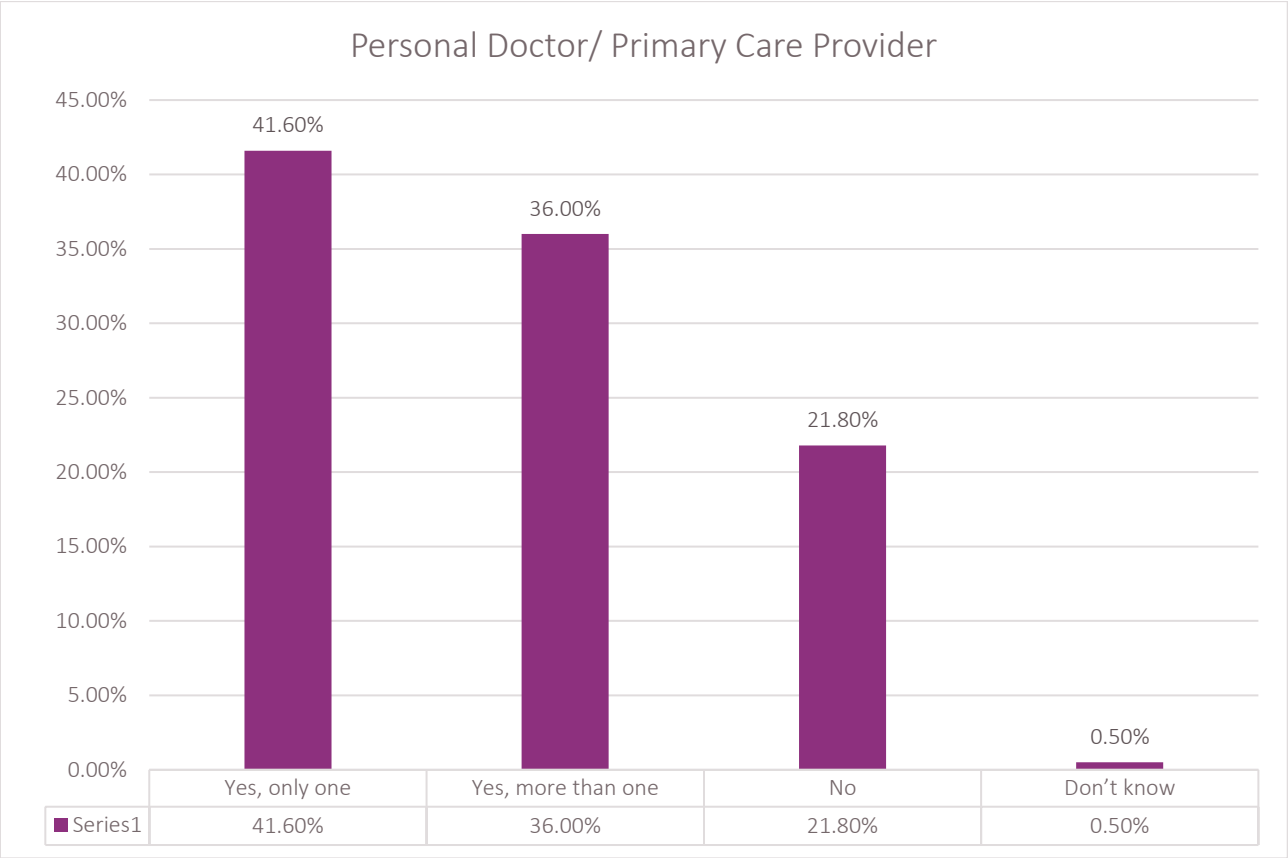
Question 17: In the last 12 months were you ever hungry, but did not eat because there was not enough money for food? (Answered 399, Skipped 2)



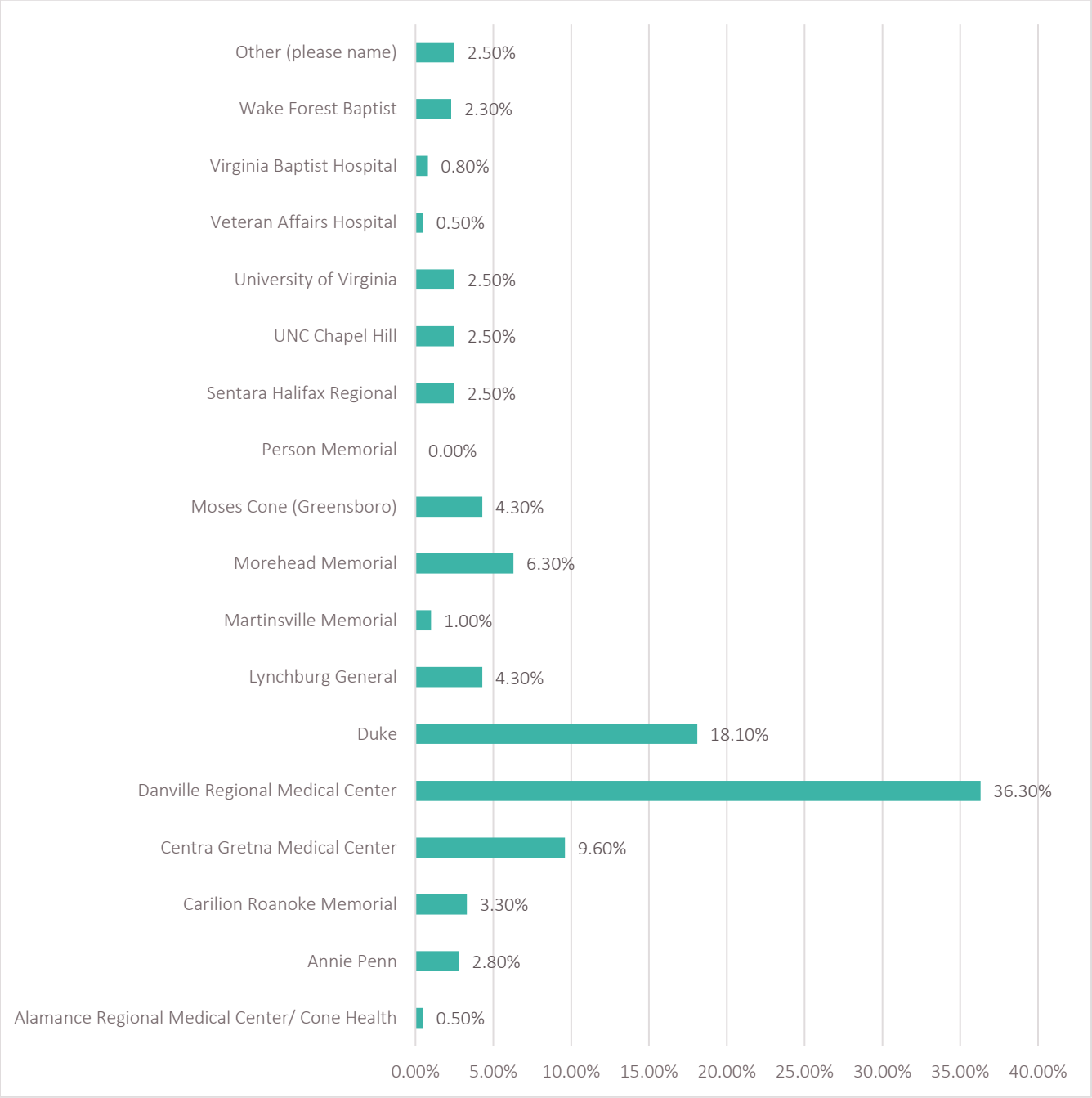
Question 18: How do you pay for your healthcare? (Check ALL that apply) (Answered 397, Skipped 4)



Question 19: Do you have a person(s) who you think of as your personal doctor or healthcare provider? (Answered 394, Skipped 7)



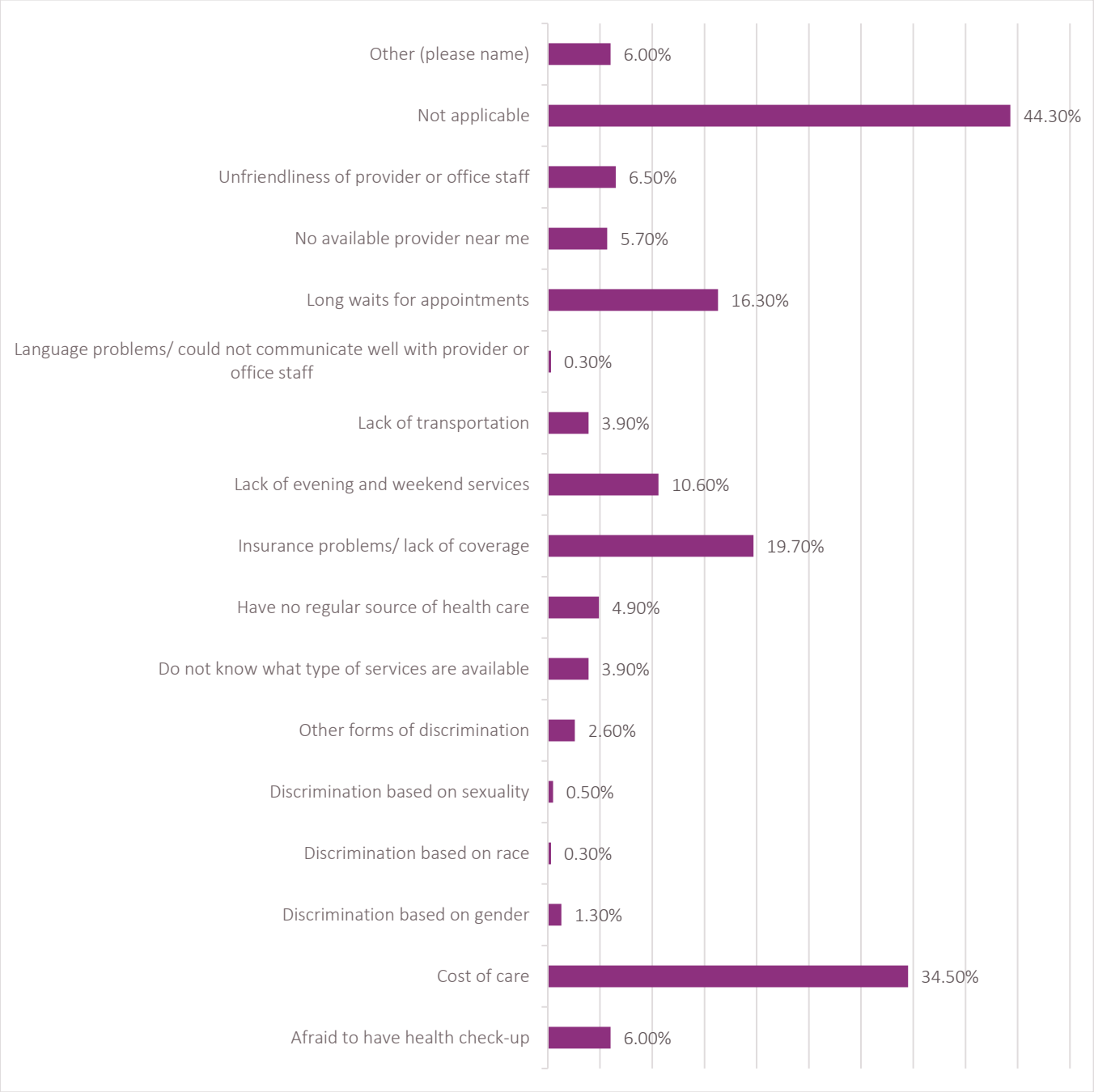
Question 20: If you had to go to the hospital, which one would you select? (Answered 387, Skipped 4)



Other Responses:

- Whichever is closest at time of emergency
- Depends on the Reason for Visit
- Don't Know
- Morehead in Eden
- Centra Danville
- Note sure: Danville, Duke or UNC

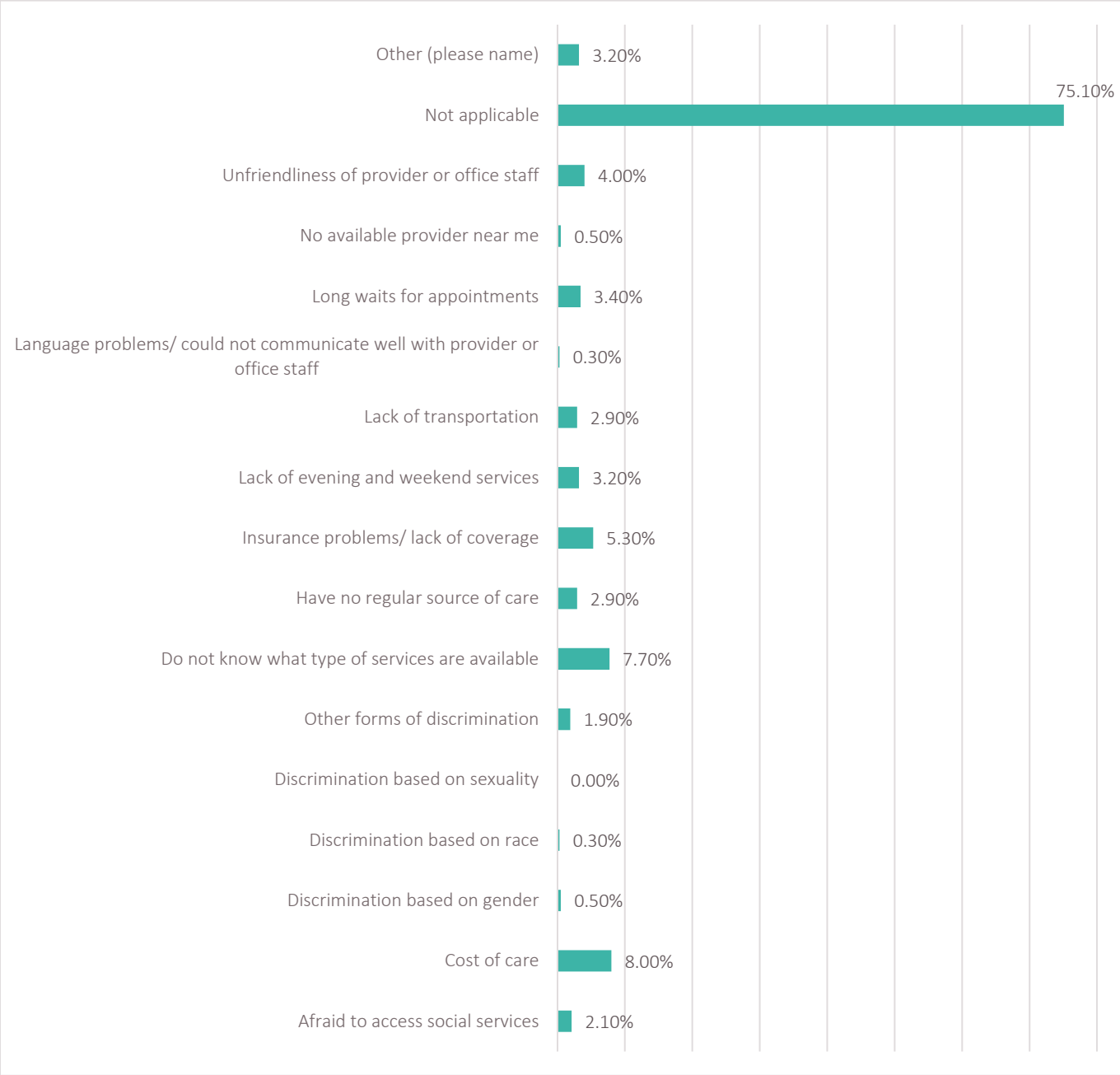
Question 21: Which of these issues have made it difficult for you to get the health care you need? (Check ALL that apply) (Answered 386, Skipped 15)



Other responses:

- Go to free clinic
- Does not return calls
- Gas Money
- Hard to find a doctor that will think out of the box that can fine what is wrong
- Overall out-of-practices of providers; no alternative medicine providers
- Getting time off from work
- Length of travel (distance)

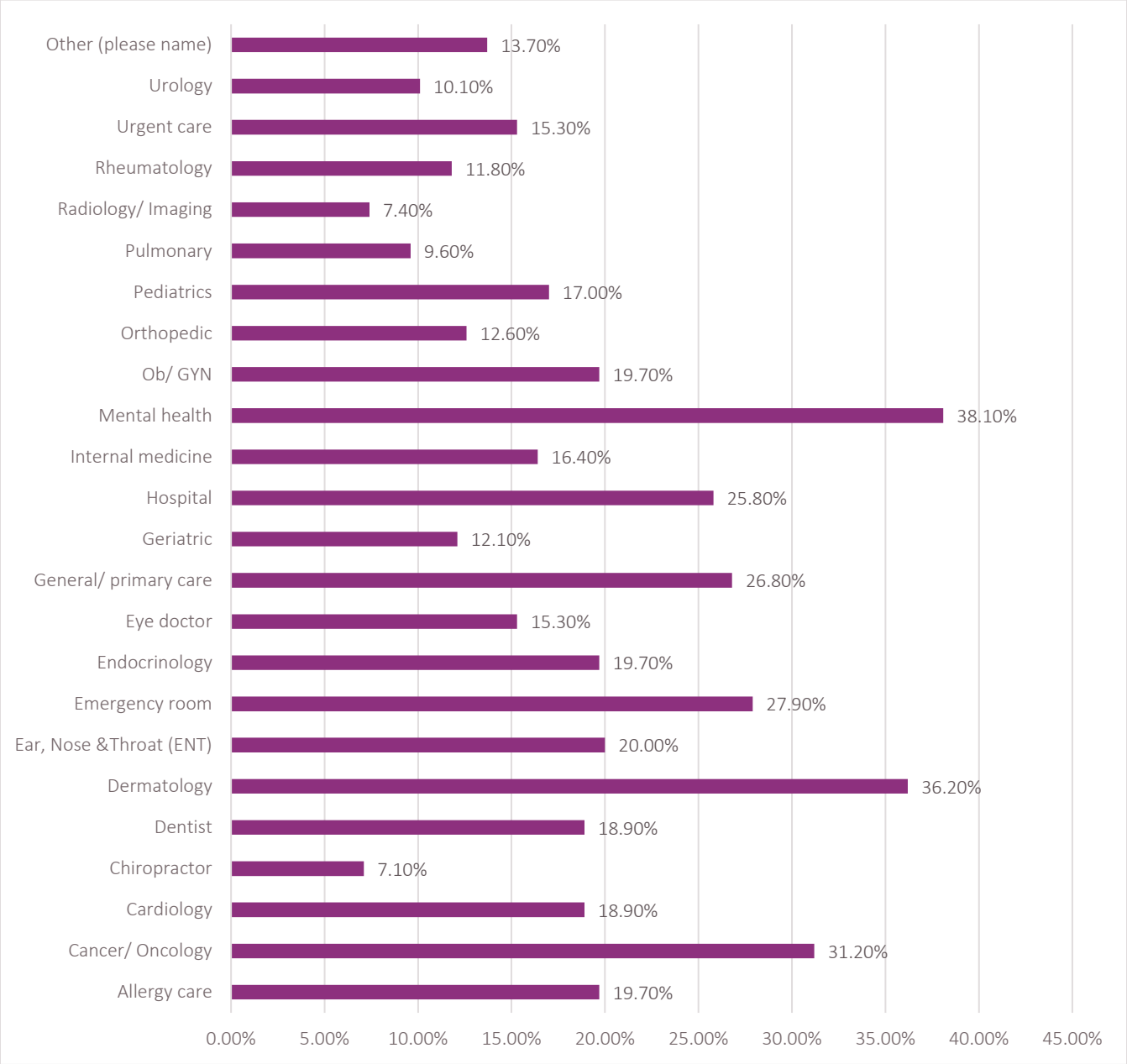
Question 22: Which of these issues have made it difficult for you to get the social services you need? (Check ALL that apply) (Answered 377, Skipped 24)



Other responses:

- High income bracket
- Made just above the $ cut off
- Inquiries have directed me elsewhere and I get the runaround
- Make too much to get help, but not enough to even cover the absolute essentials
- I assume I do not qualify for services even though I regularly struggle to meet my family's needs

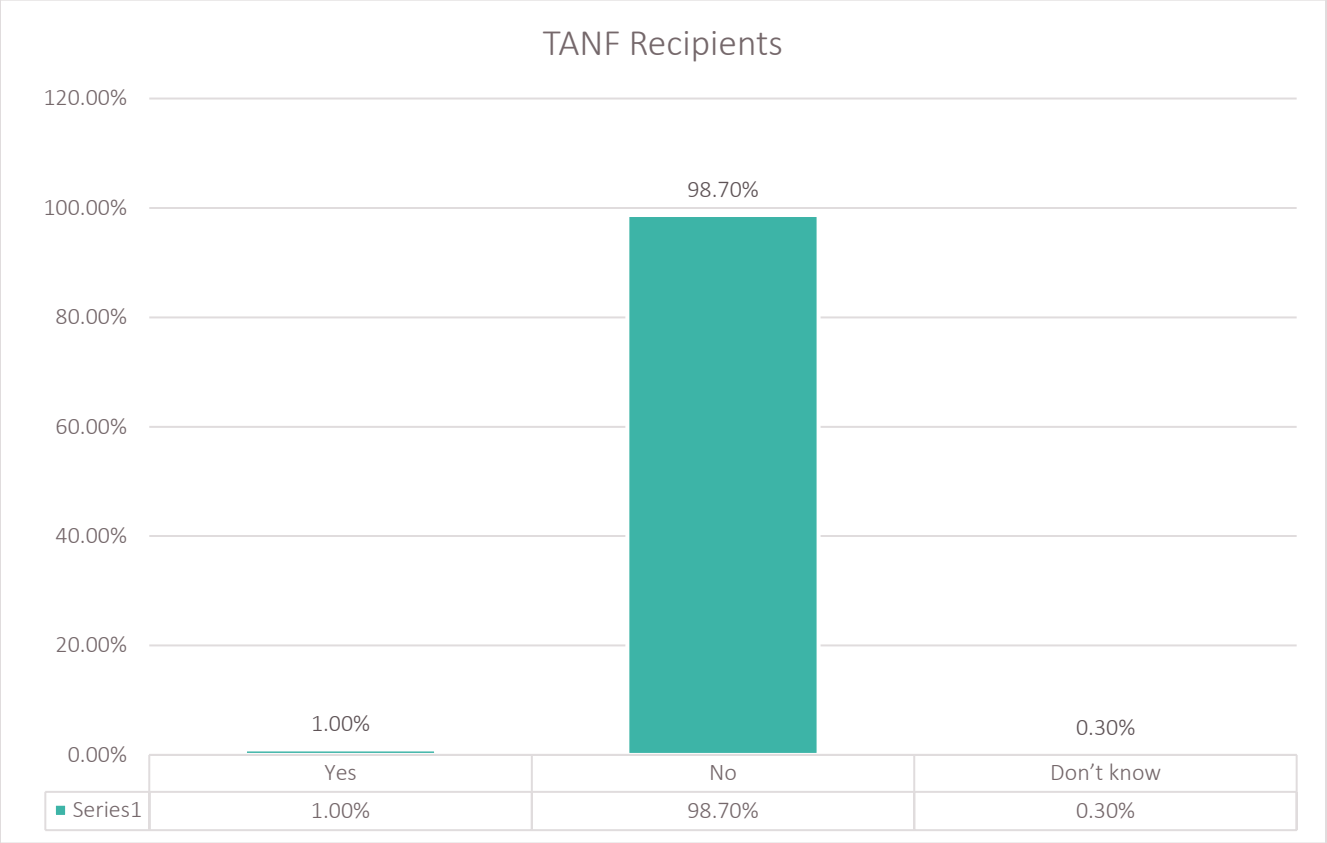
Question 23: Which medical specialties are most needed in Danville or Pittsylvania County? (Choose ALL that apply) (Answered 365, Skipped 36)



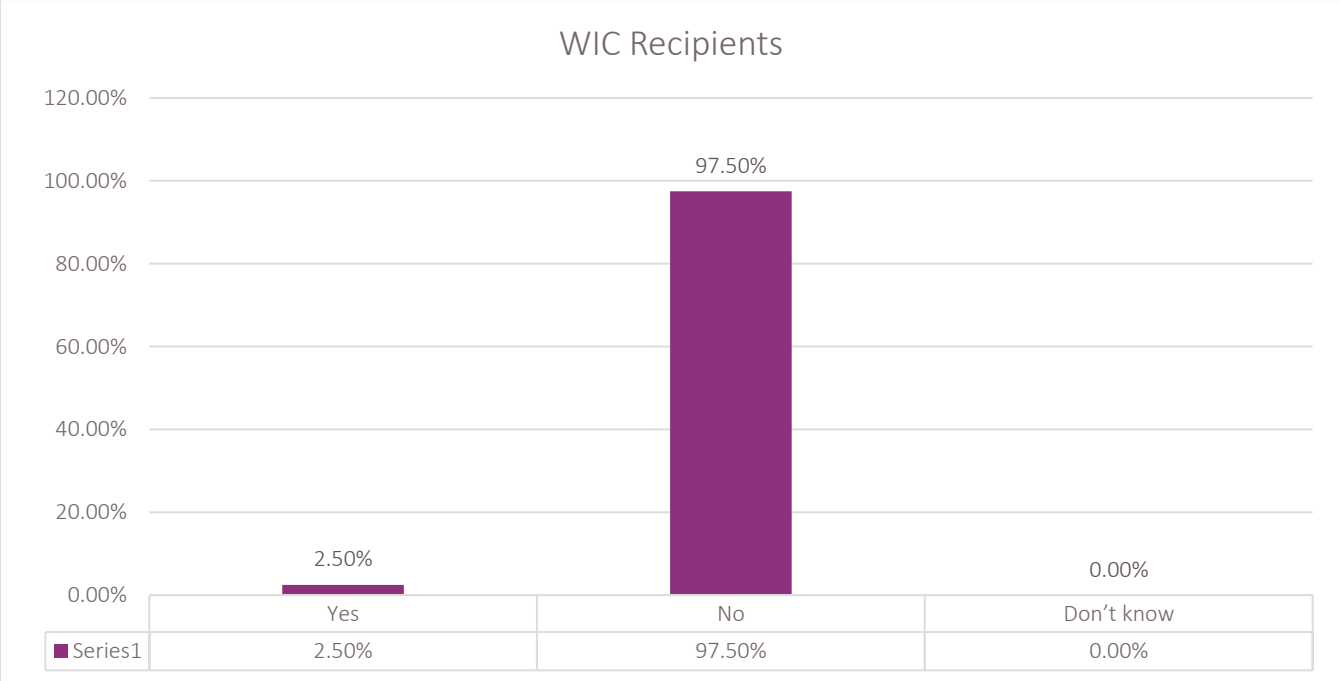
Other responses:

- Drug treatment services (4)
- Autism Spectrum Care (2)
- Gastroenterologist (4)
- All of them (2)
- Neurology (11)
- Alternative health practitioners
- Podiatrist (4)
- Specialists in auto immune disorders
- Chronic pain management doctor
- Low cost dental
- Thoracic Surgeon (2)
- Juvenile Endocrinology
- Counseling (5)

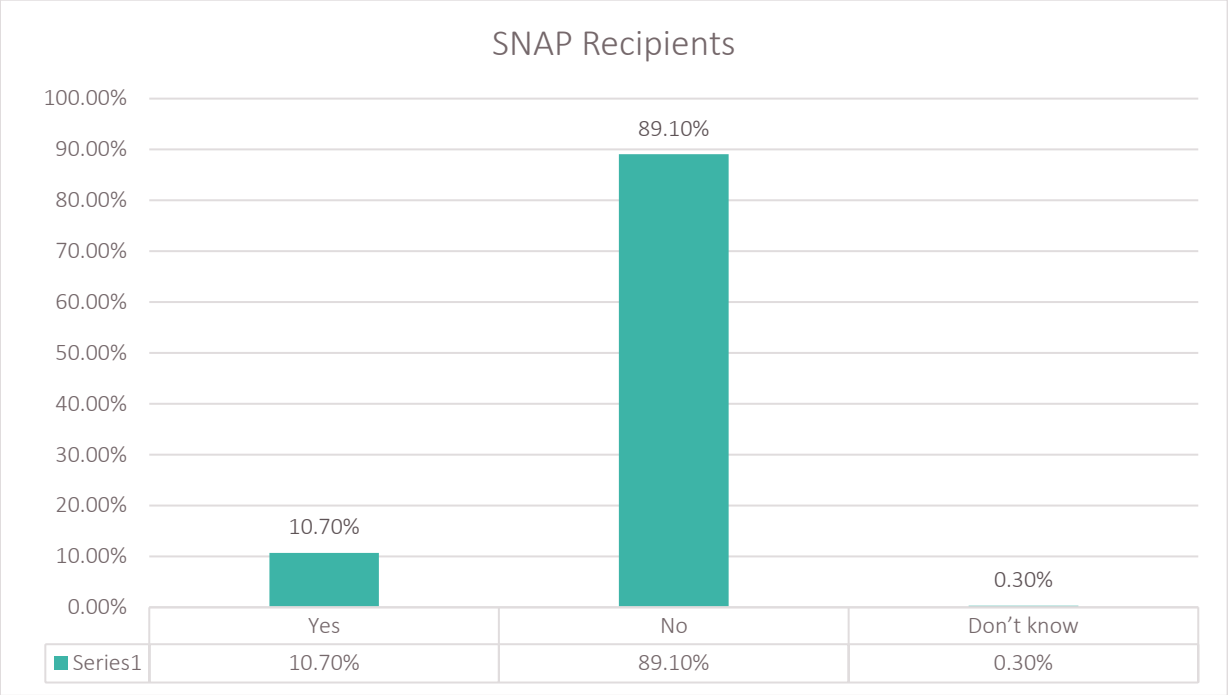
Question 24: Do you receive Temporary Assistance for Needy Families (TANF) benefits? (Answered 393, Skipped 8)



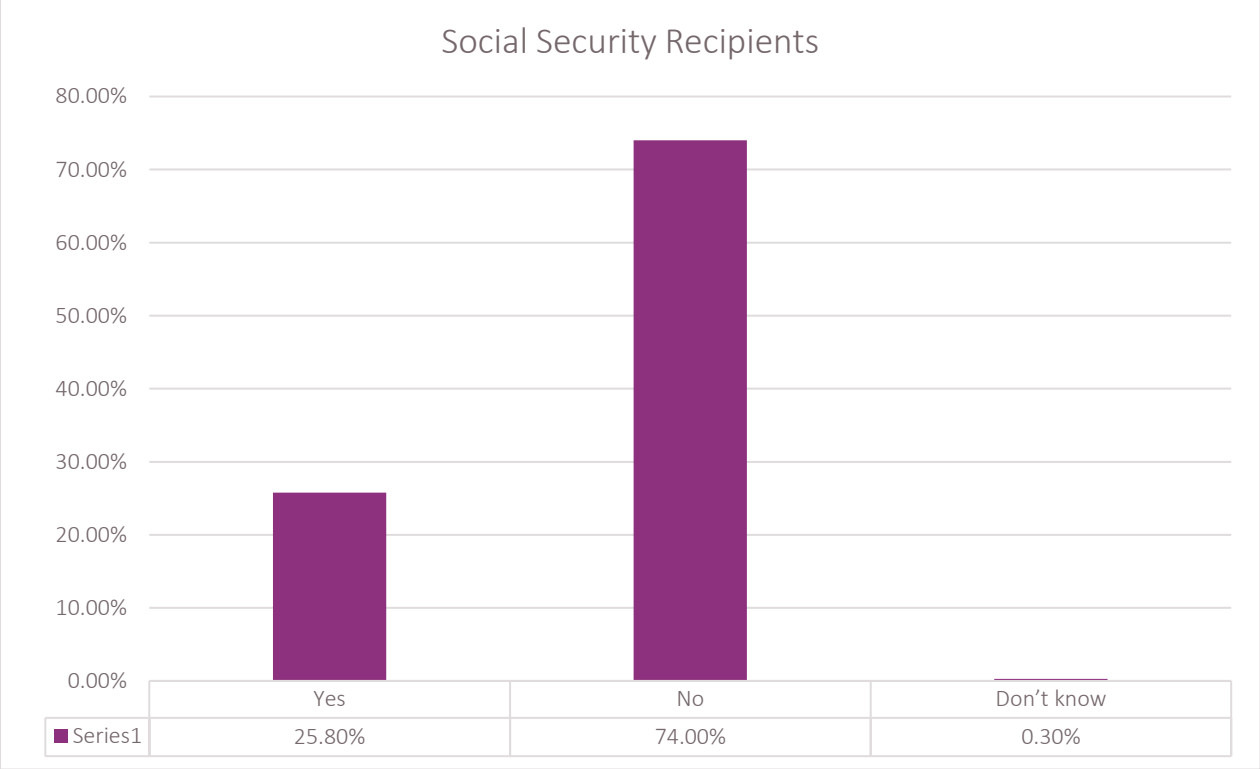
Question 25: Do you receive Women Infants and Children (WIC) benefits? (Answered 395, Skipped 6)



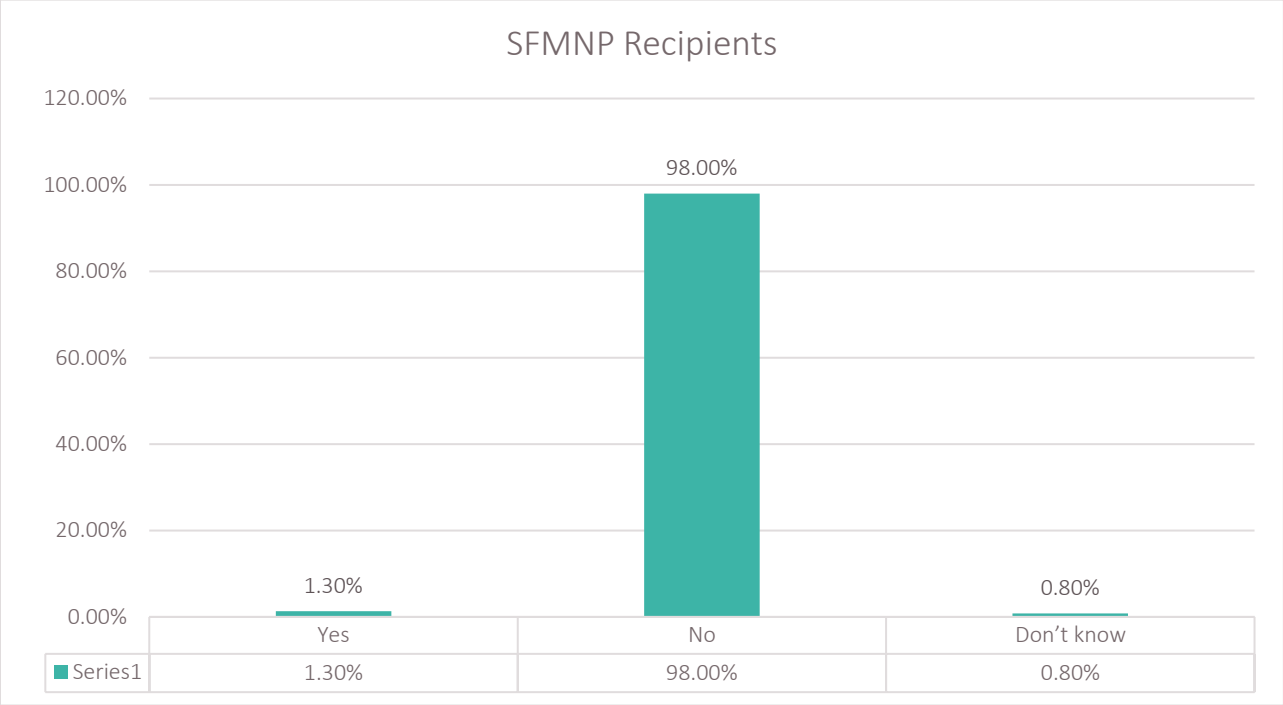
Question 26: Do you receive Supplemental Nutrition Assistance Program (SNAP) benefits? (Answered 393, Skipped 8)



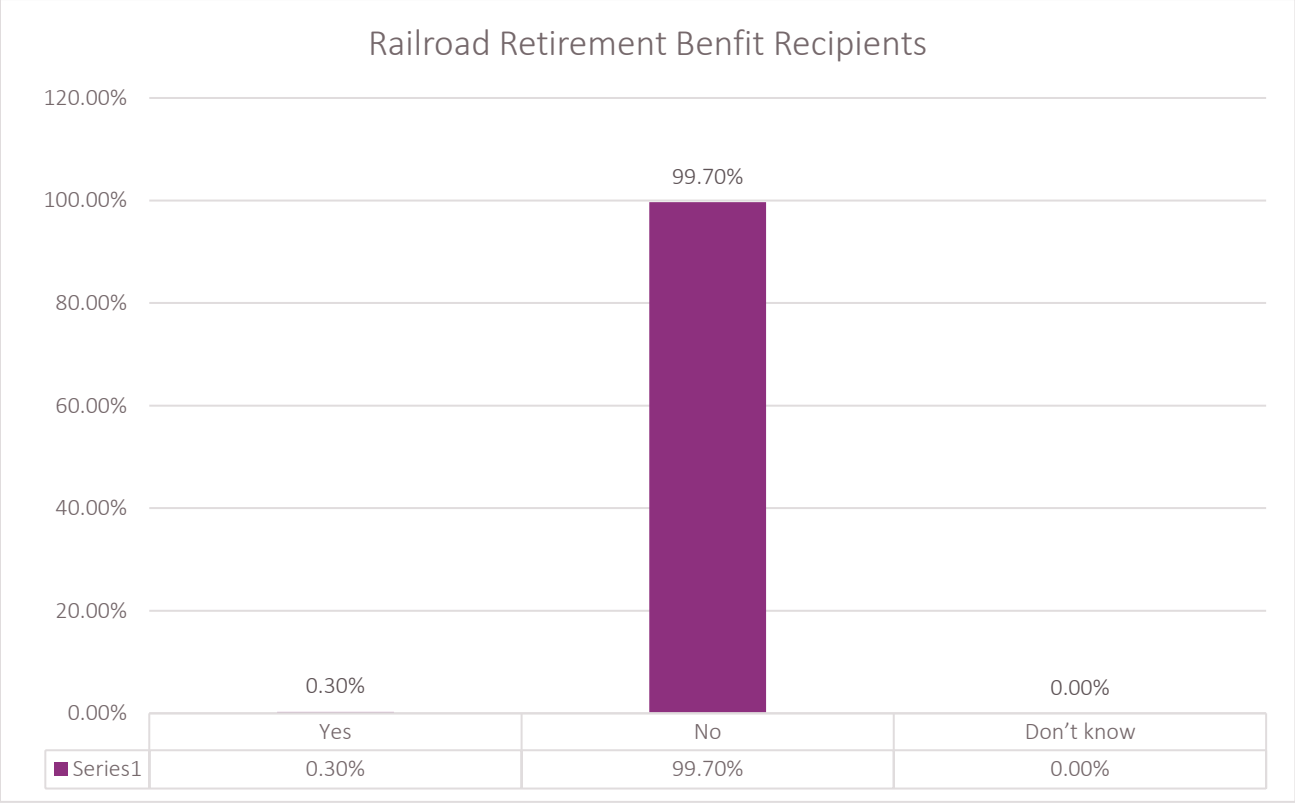
Question 27: Do you receive Social Security benefits? (Answered 392, Skipped 9)



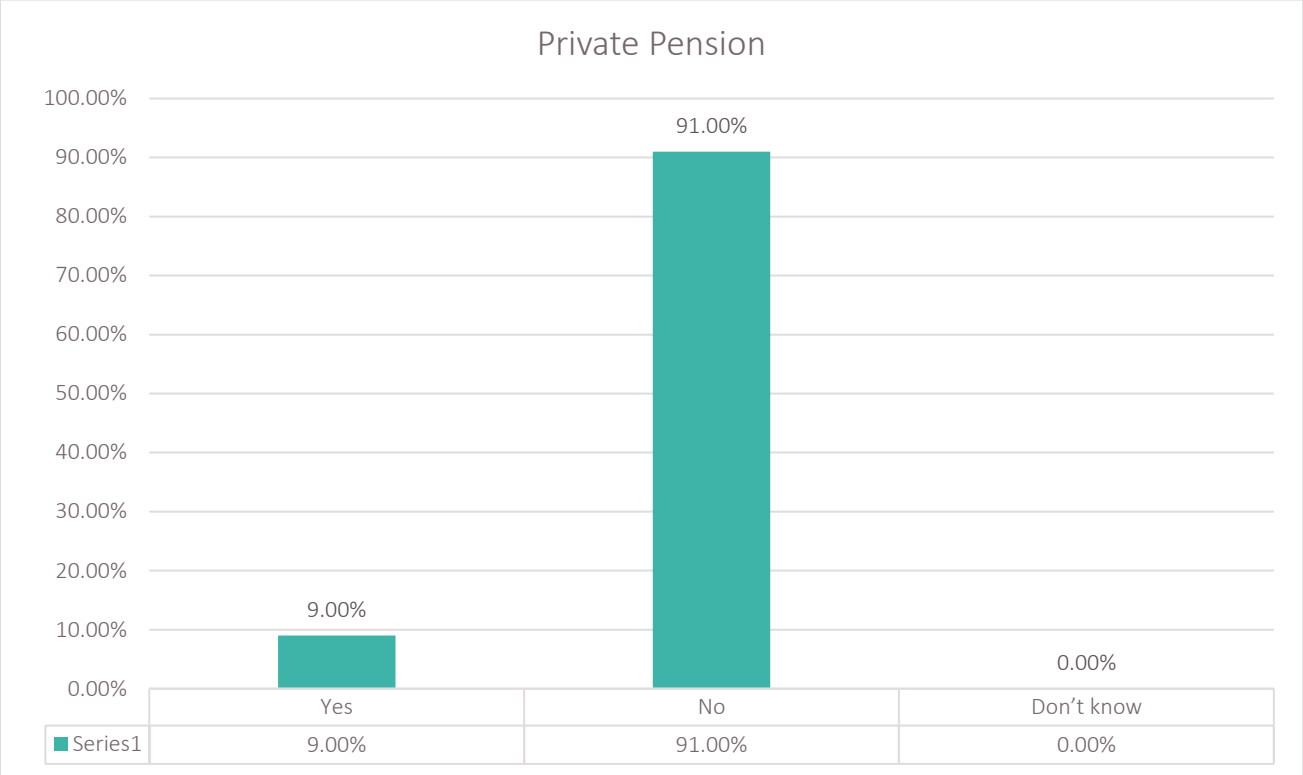
Question 28: Do you receive Senior Farmers' Market Nutrition Program (SFMNP) benefits? (Answered 395, Skipped 6)



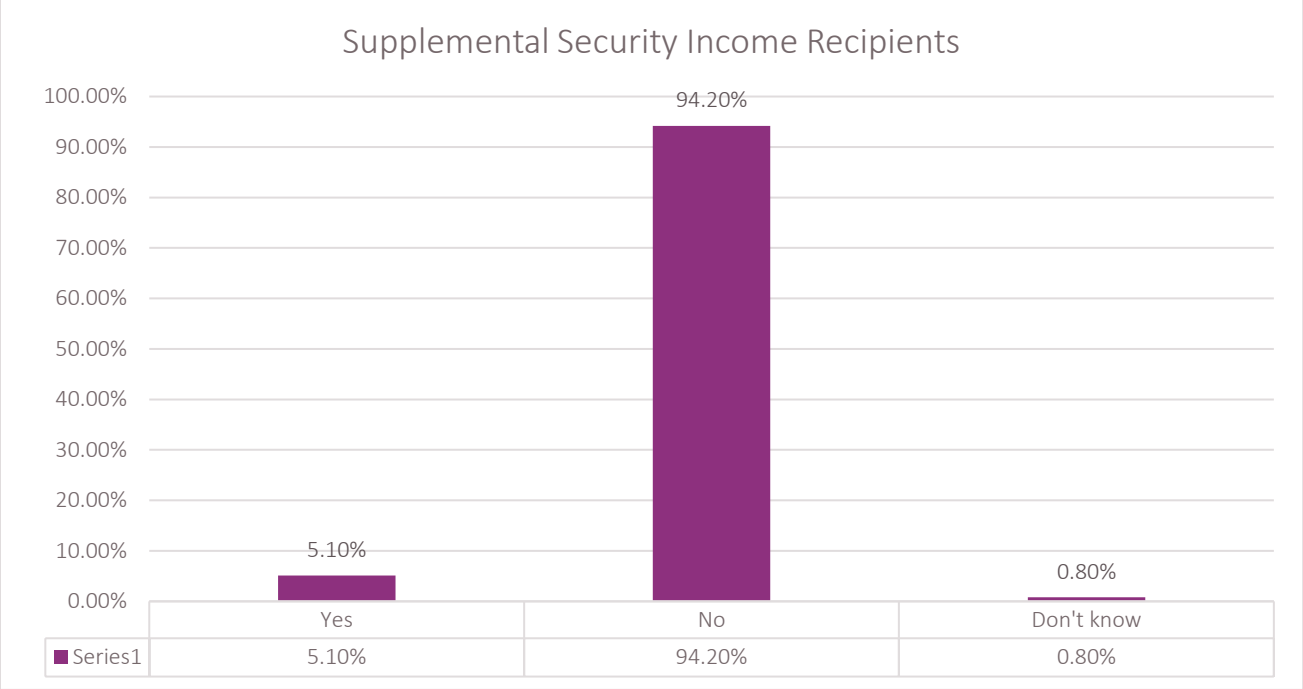
Question 29: Do you receive Railroad retirement benefits? (Answered 392, Skipped 8)



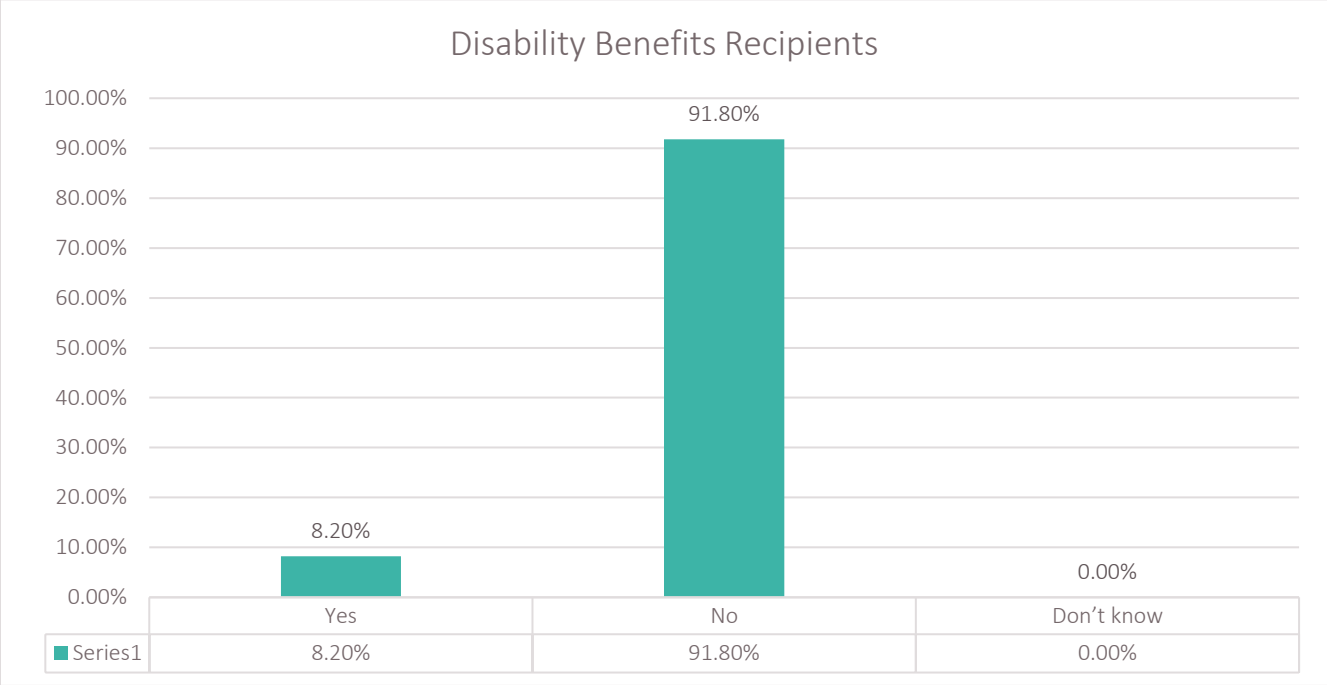
Question 30: Do you receive a private pension? (Answered 388, Skipped 13)



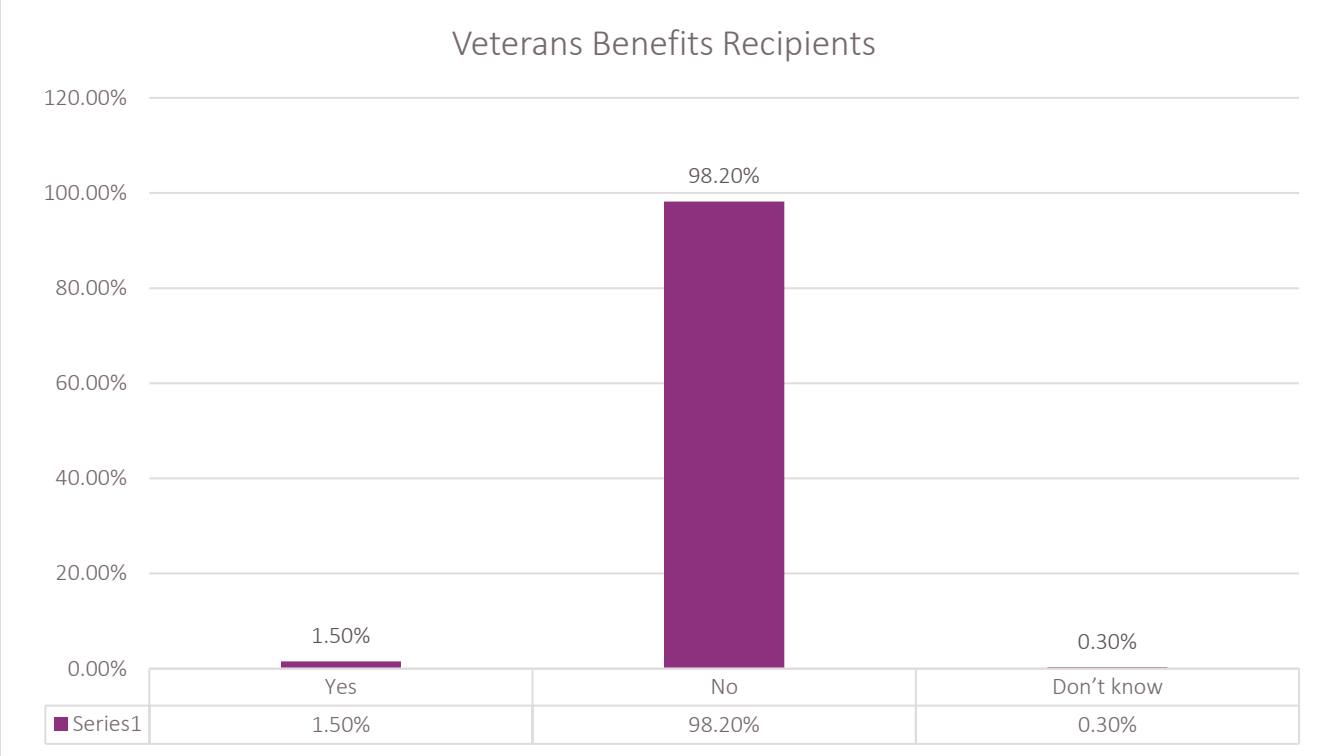
Question 31: Do you receive Supplemental Security Income (SSI)? (Answered 394, Skipped 7)



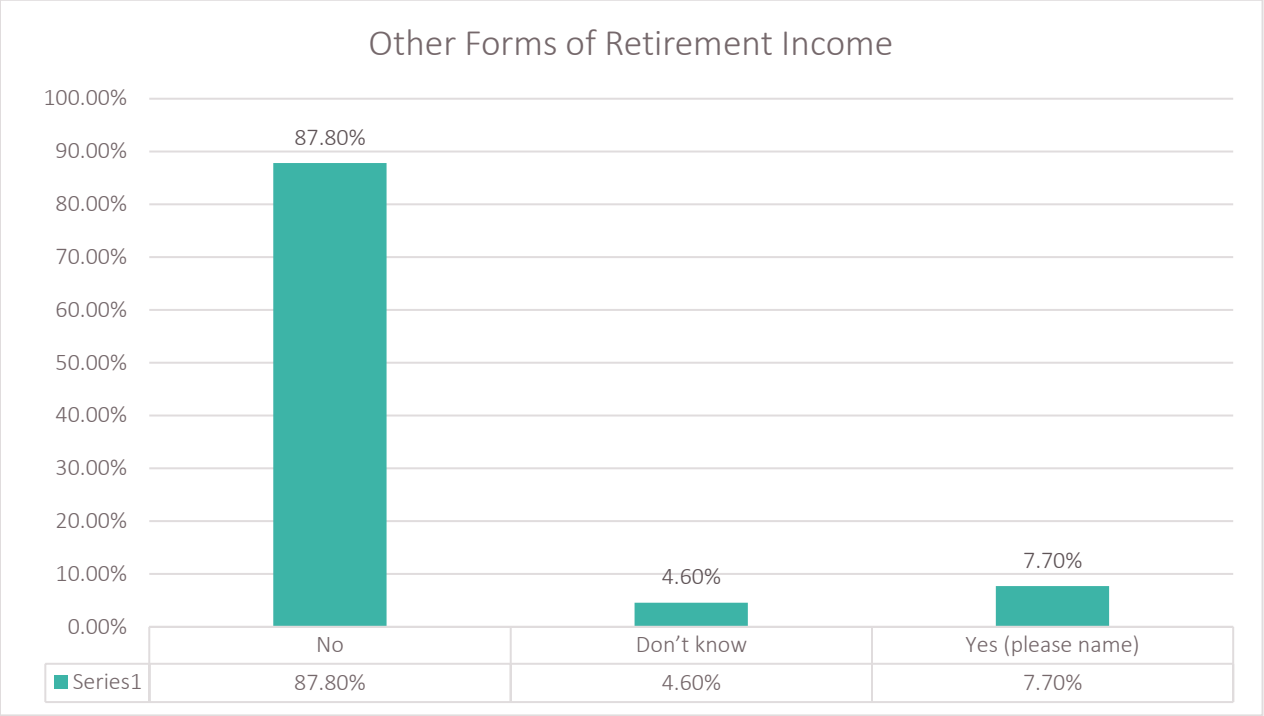
Question 32: Do you receive Disability benefits? (Answered 392, Skipped 9)



Question 33: Do you receive Veterans benefits? (Answered 392, Skipped 9)



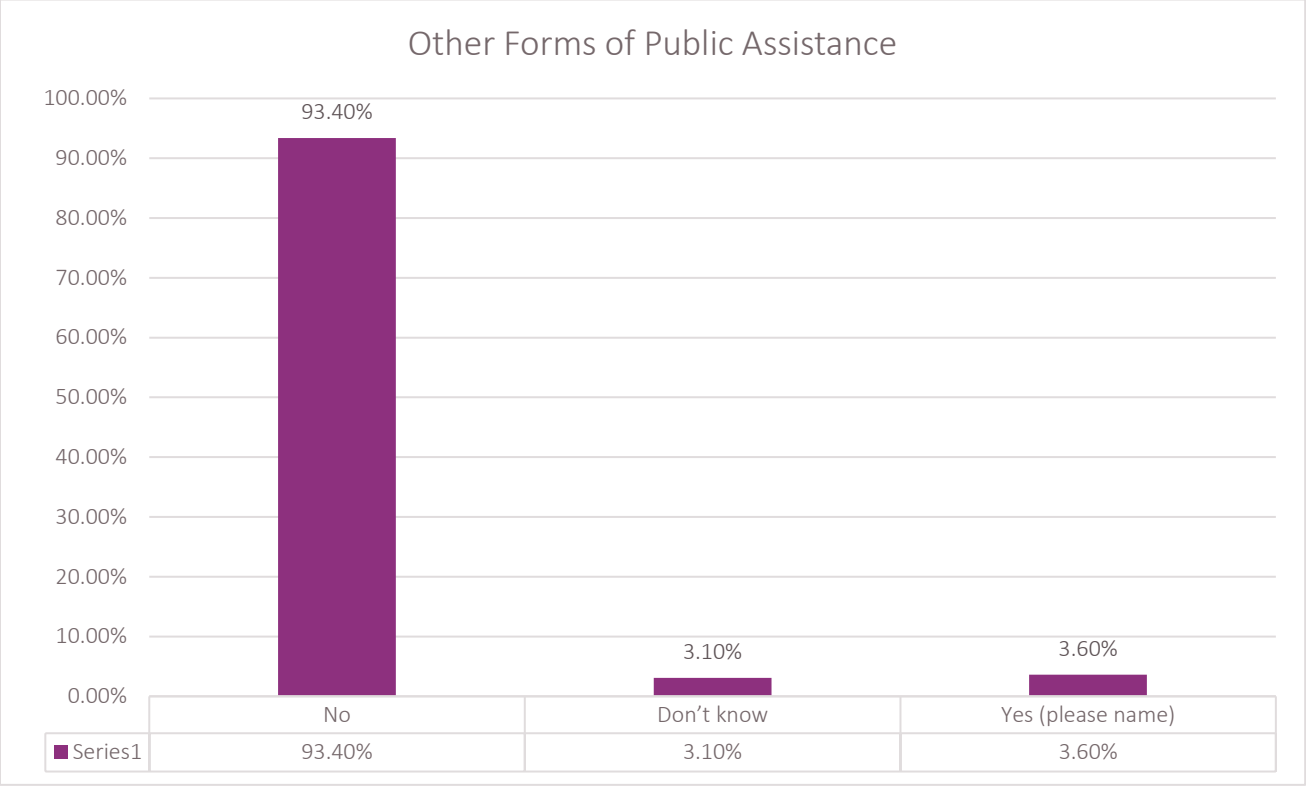
Question 34: Do you receive other forms of retirement income? (Answered 392, Skipped 9)



Other Responses

- Money from parent's will
- IRA (3)
- Investment income (2)
- Spouses retirement (4)
- 401K (3)
- Military retirement
- Company Pension Plan (12)
- VRS (4)

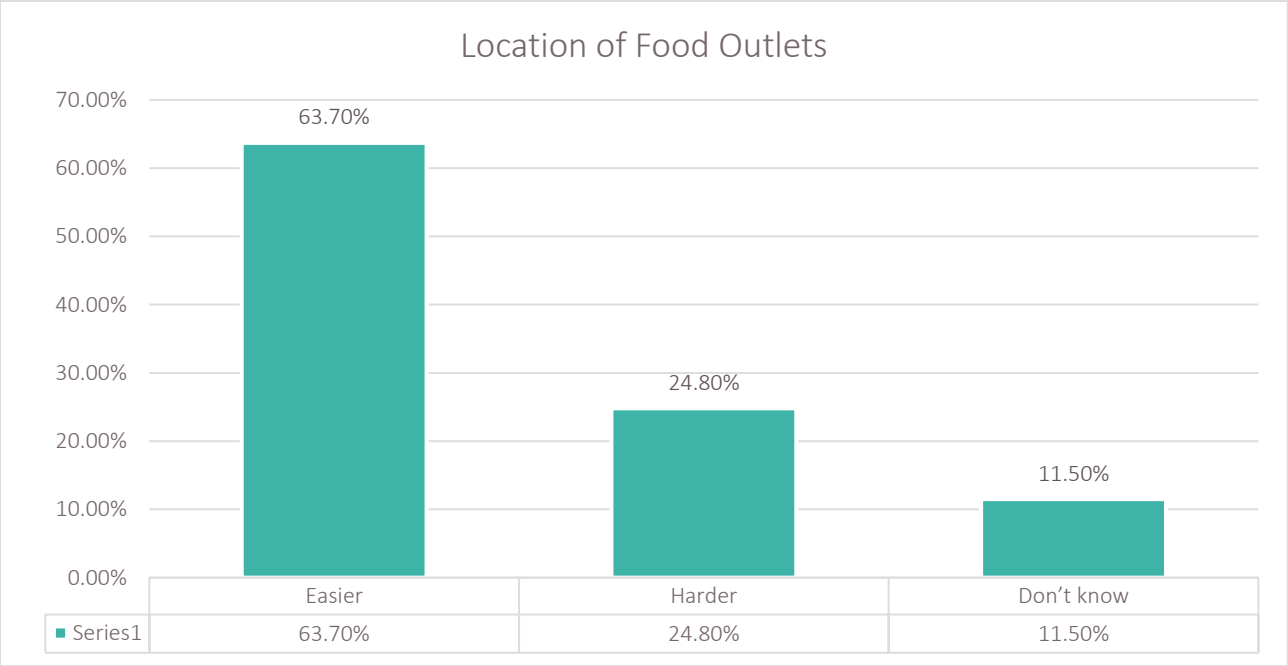
Question 35: Do you receive other forms of public assistance? (Answered 392, Skipped 9)



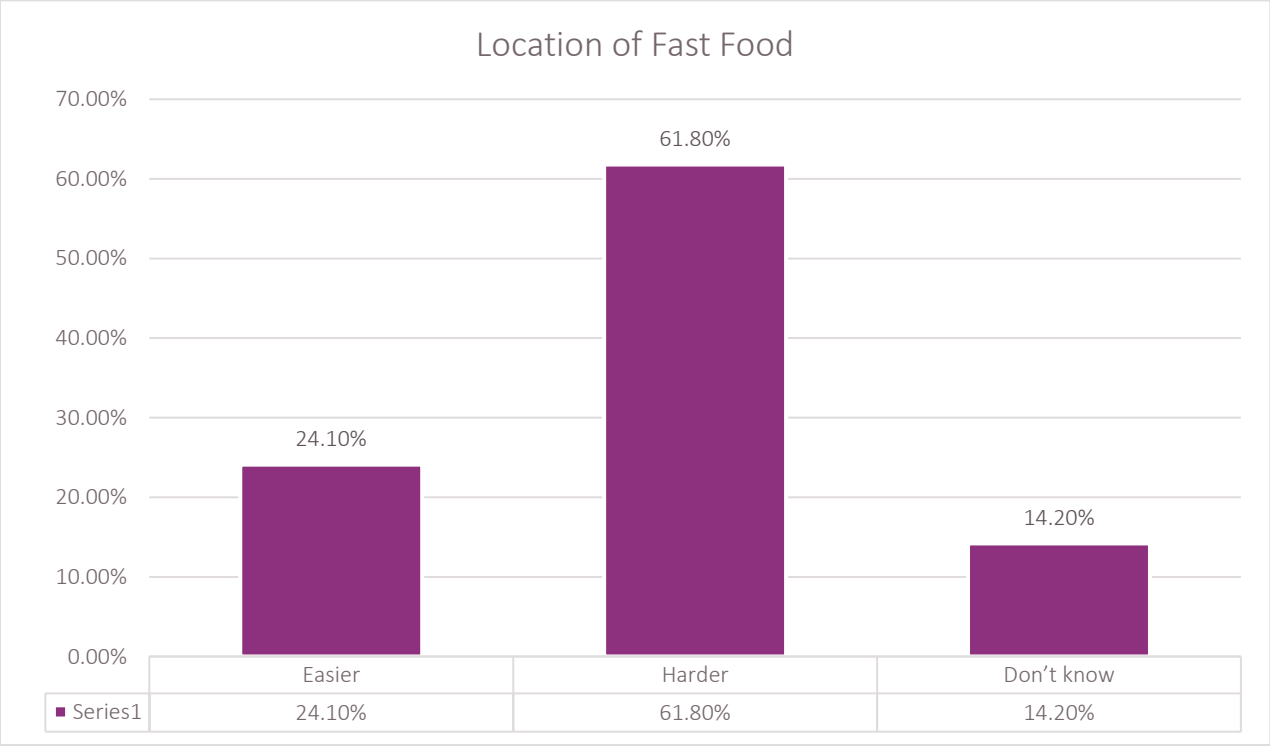
Other Responses

- Fuel Assistance (3)
- Daycare expense
- Medicaid (7)
- Child Support
- Section 8

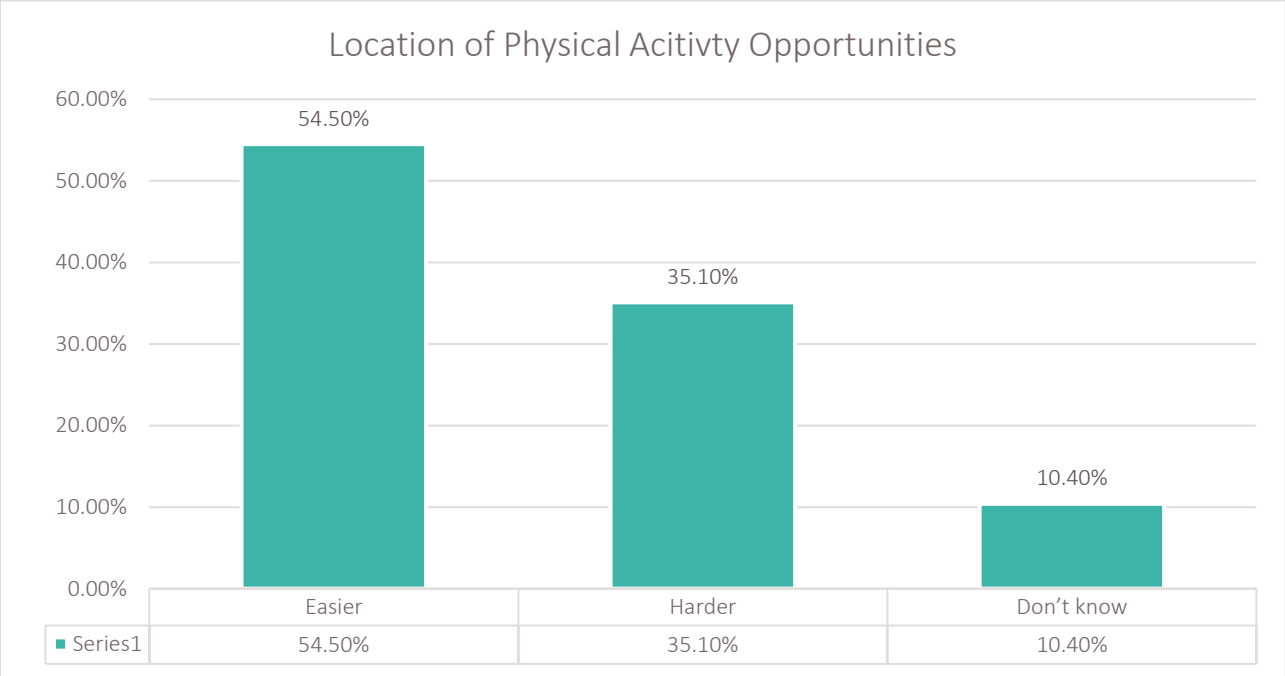
Question 36: The location of food outlets (grocery stores, corner stores, convenient stores, community gardens and farmers' markets) makes it _____ to make healthy choices (Answered 391, Skipped 10)



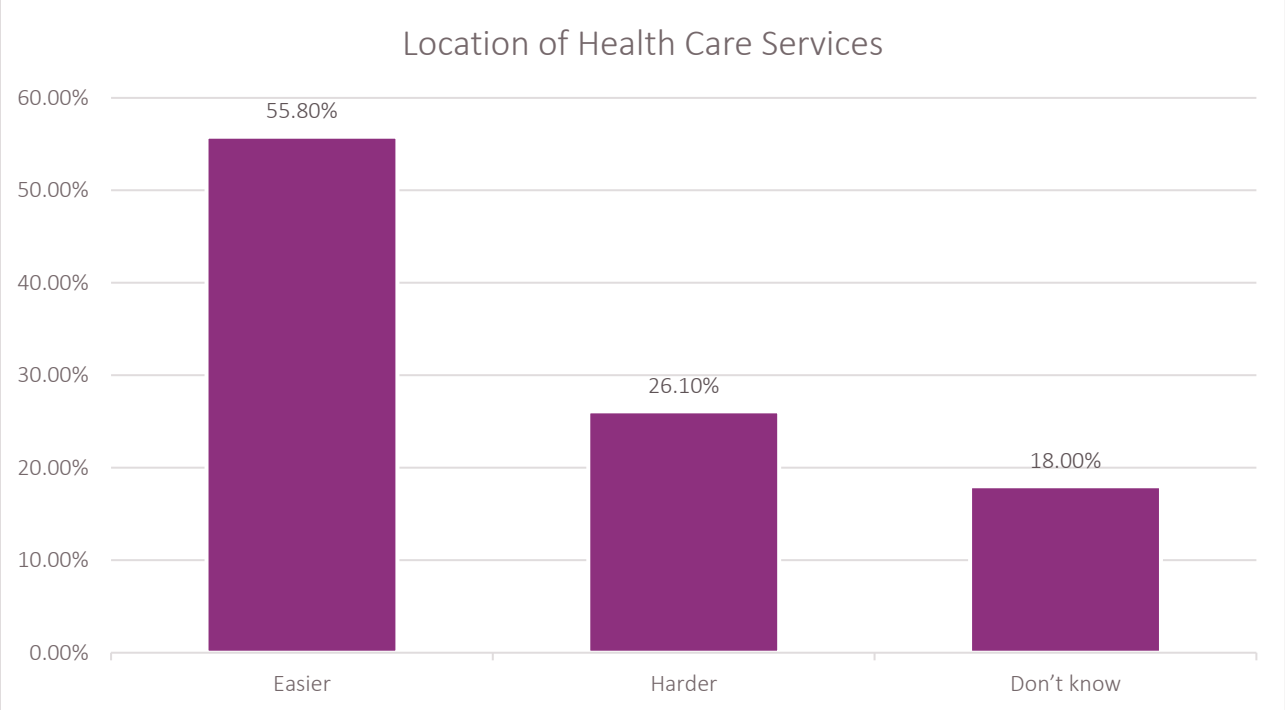
Question 37: The location of fast food restaurants makes it _____ to make healthy choices (Answered 395, Skipped 6)



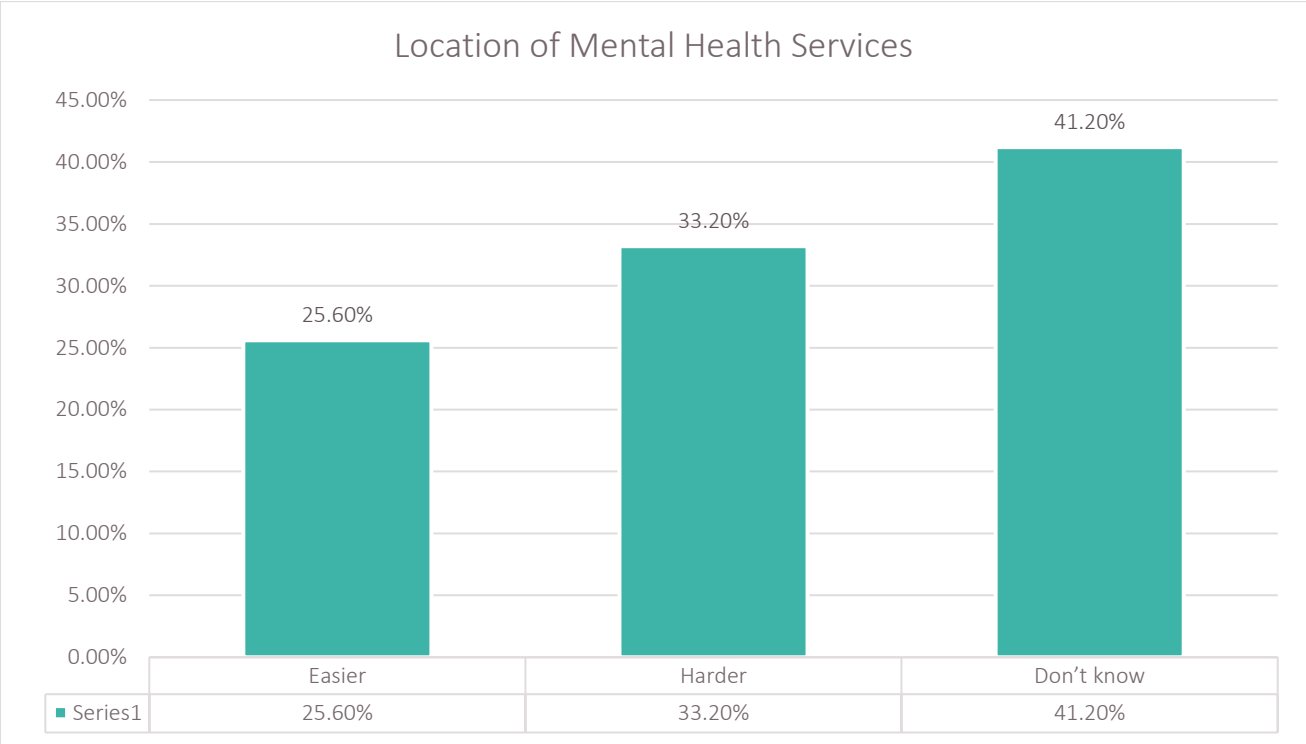
Question 38: The location of parks, playgrounds, open spaces, gyms and recreational facilities makes it_____ to make healthy choices (Answered 396' Skipped 5)



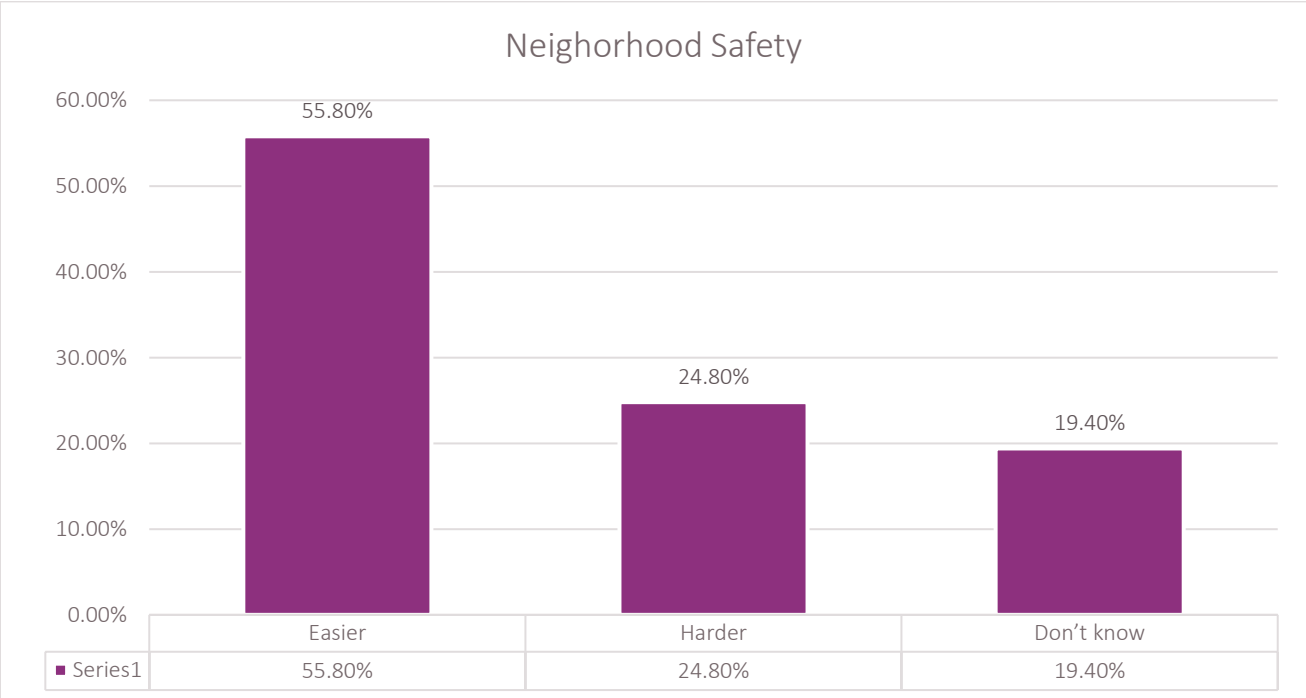
Question 39: The location of heath care services makes it_____ to make healthy choices (Answered 394, Skipped 7)



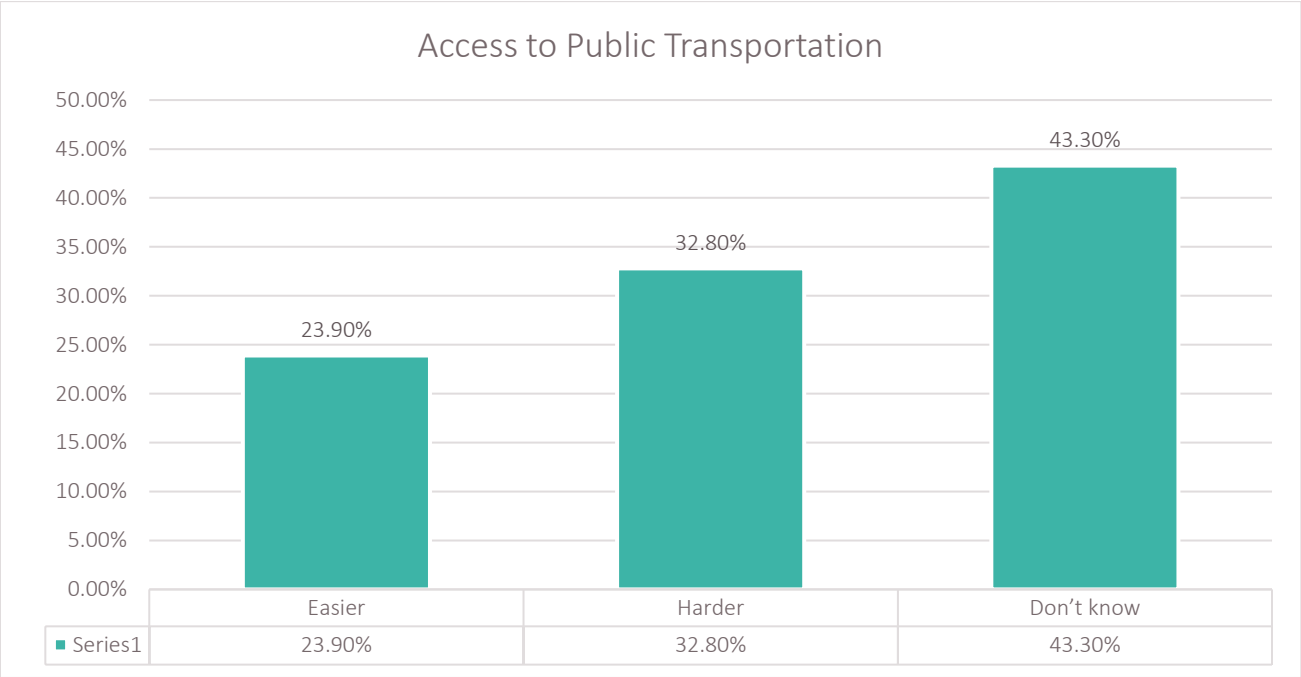
Question 40: The location of mental health services makes it _____ to make healthy choices (Answered 391, Skipped 10)



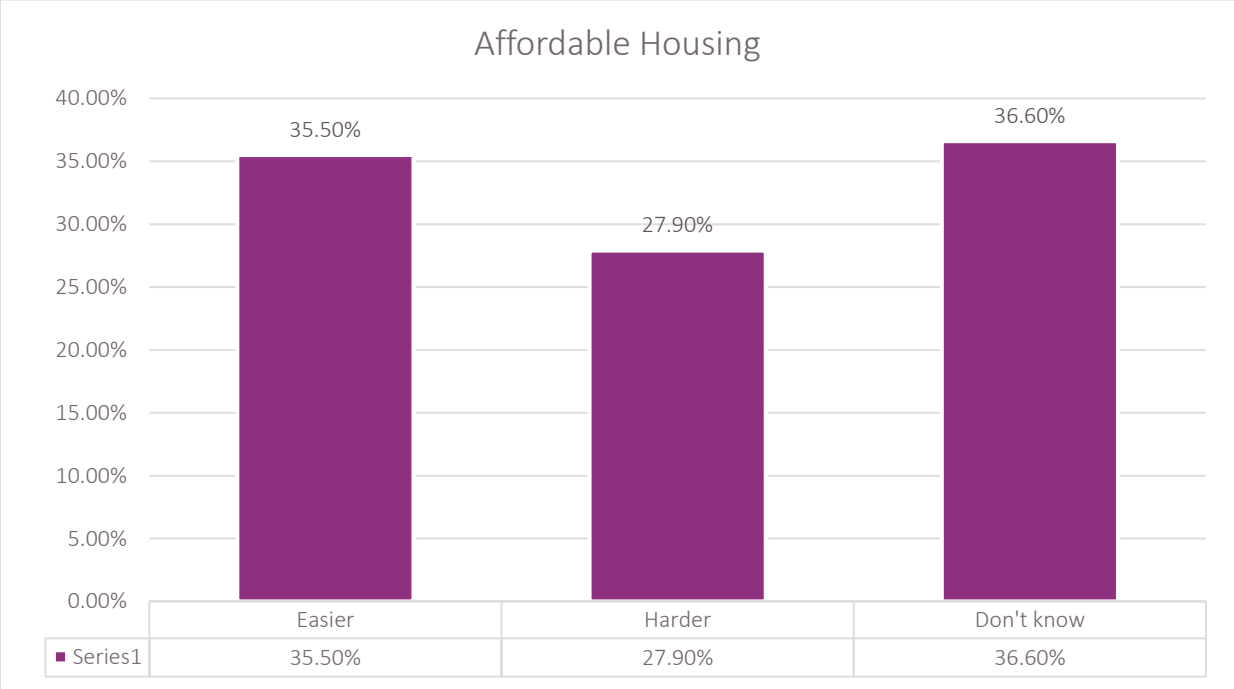
Question 41: The current level of safety in your neighborhood makes it _____ to make healthy choices (Answered 391, Skipped 10)



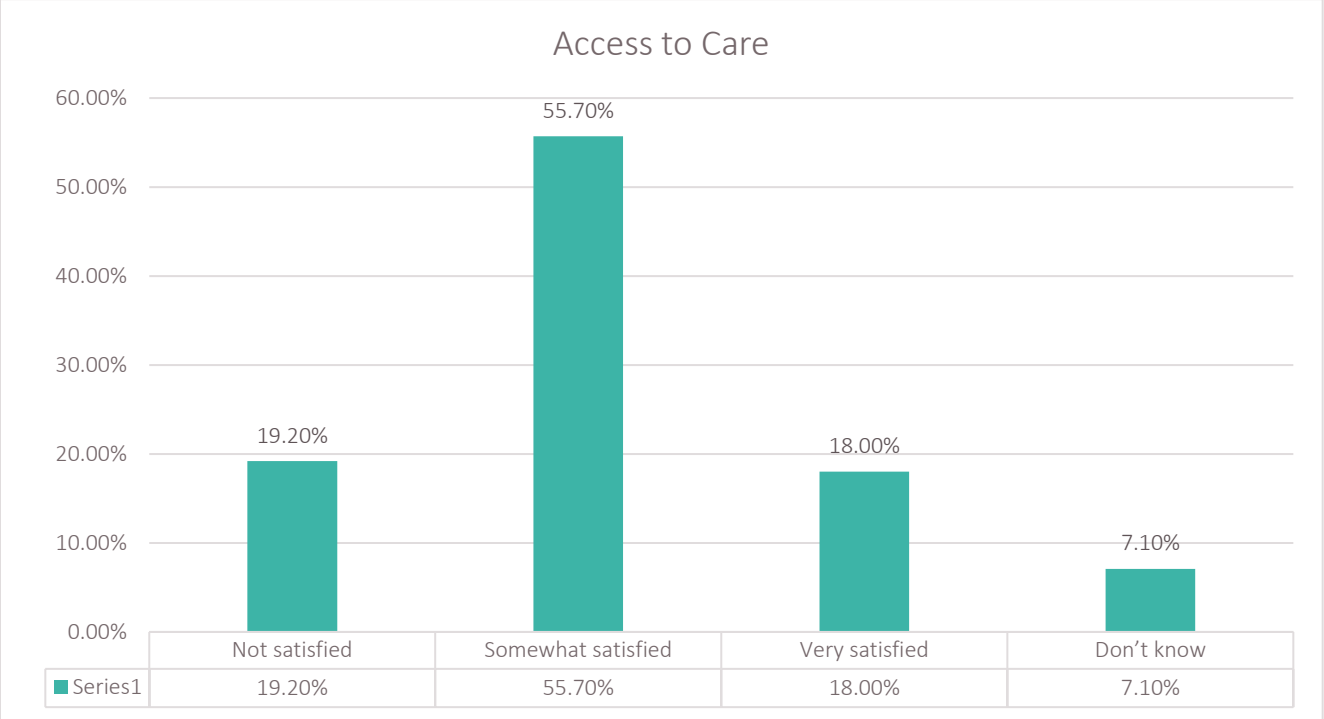
Question 42: Your current level of access to public transportation makes it _____ to make healthy choices (Answered 393, Skipped 8)



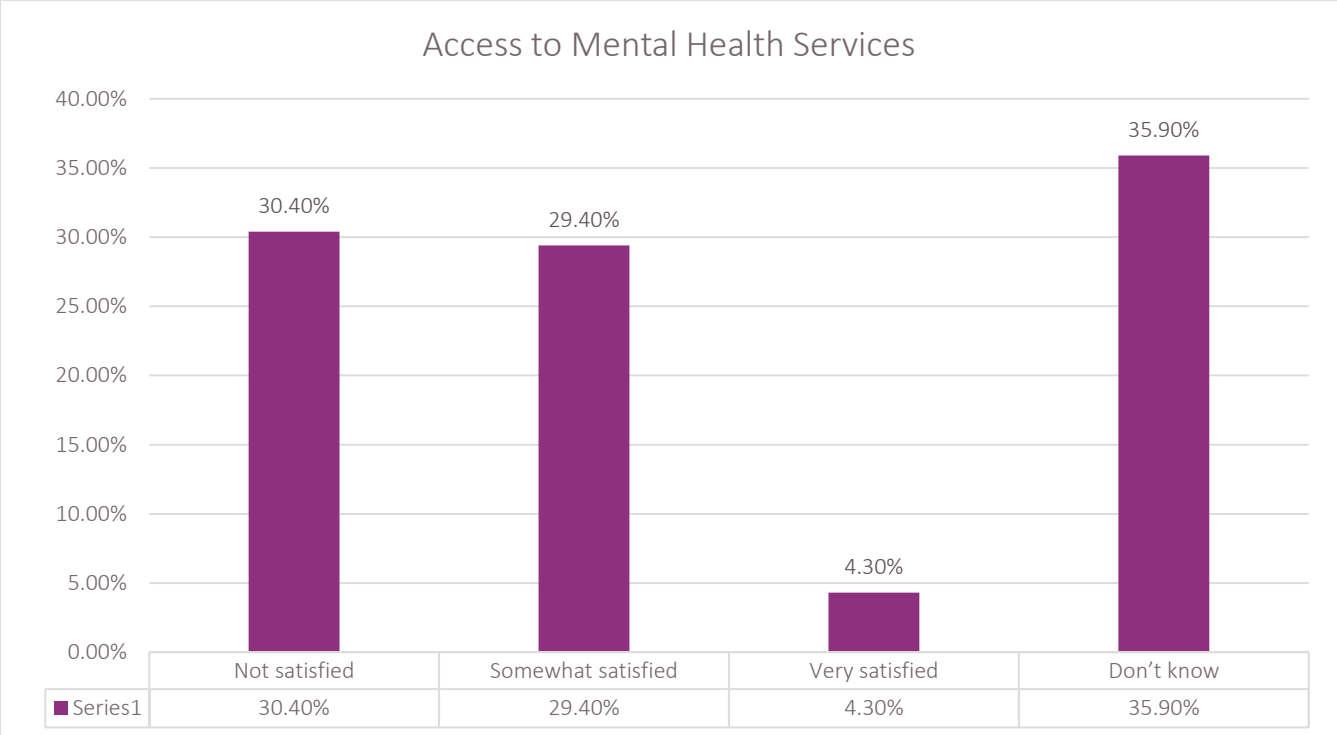
Question 43: The affordability of housing in your community makes it_____ to make healthy choices (Answered 391, Skipped 10)



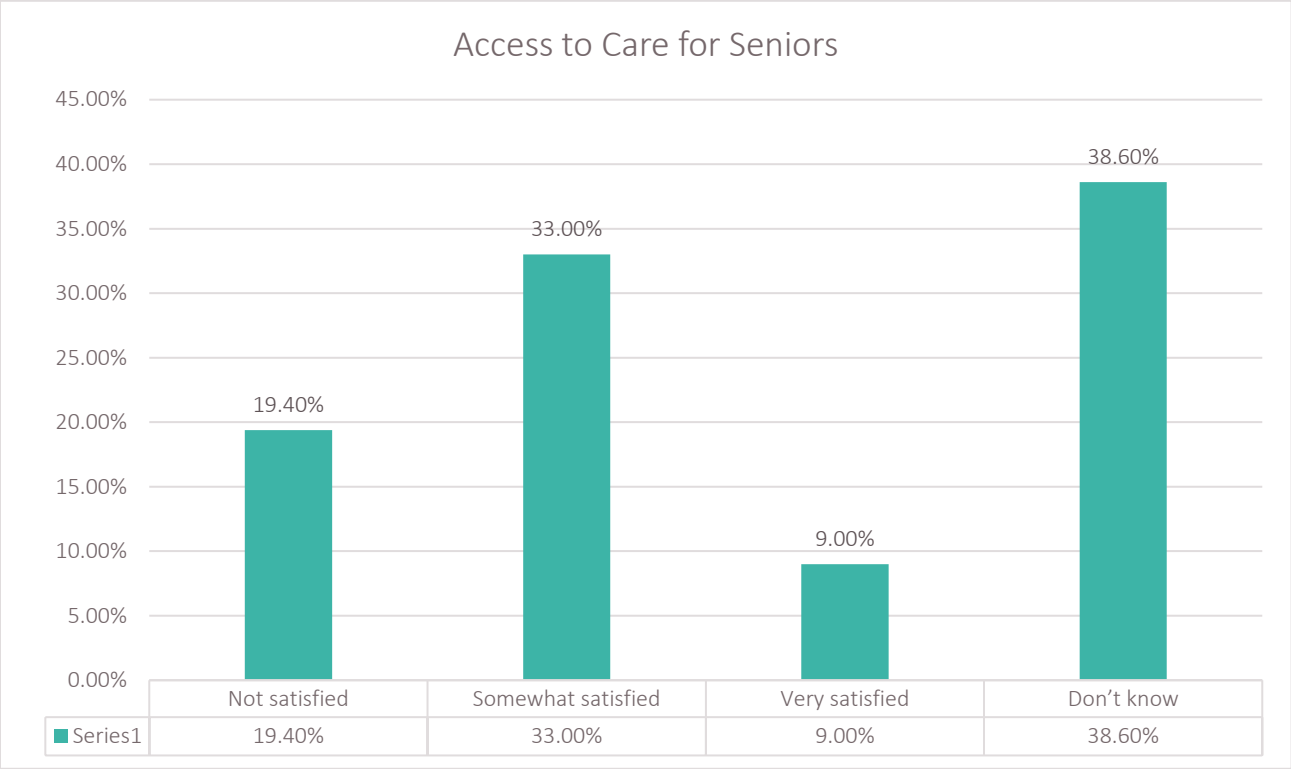
Question 44: How do you feel about the accessibility of health care or medical services in the area? (Answered 395, Skipped 6)



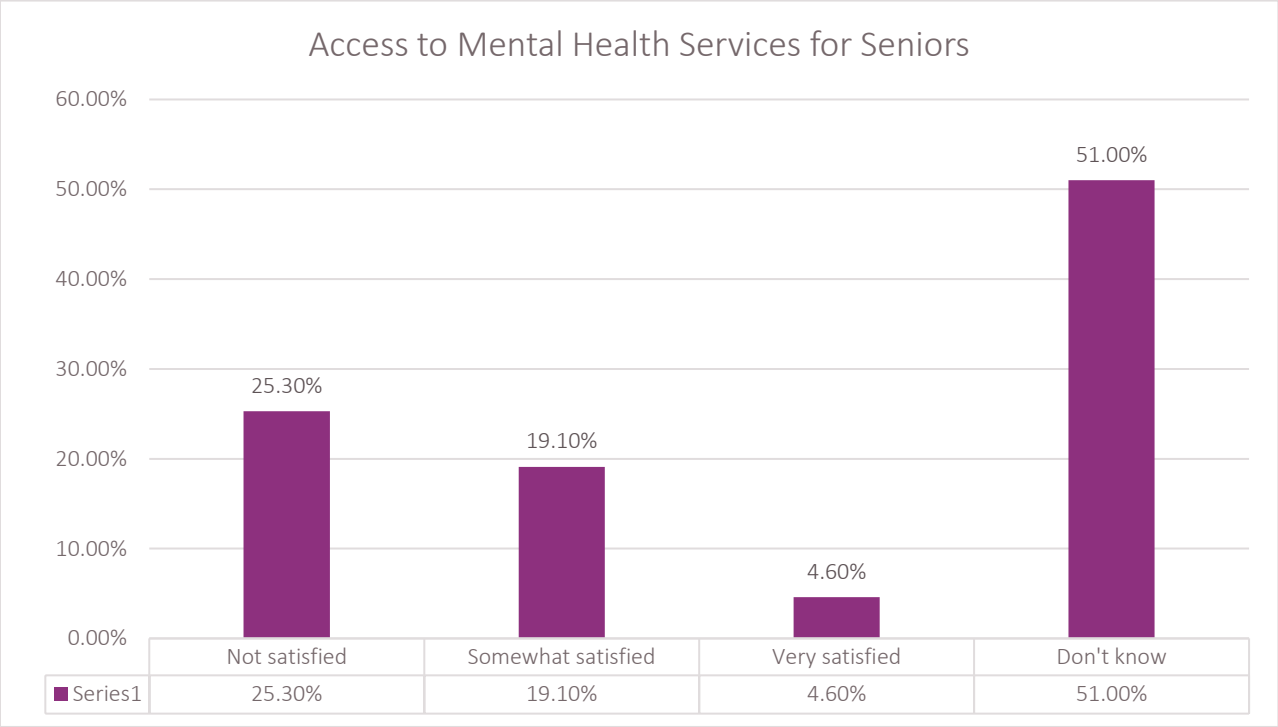
Question 45: How do you feel about the accessibility of mental health services in the area? (Answered 395, Skipped 6)



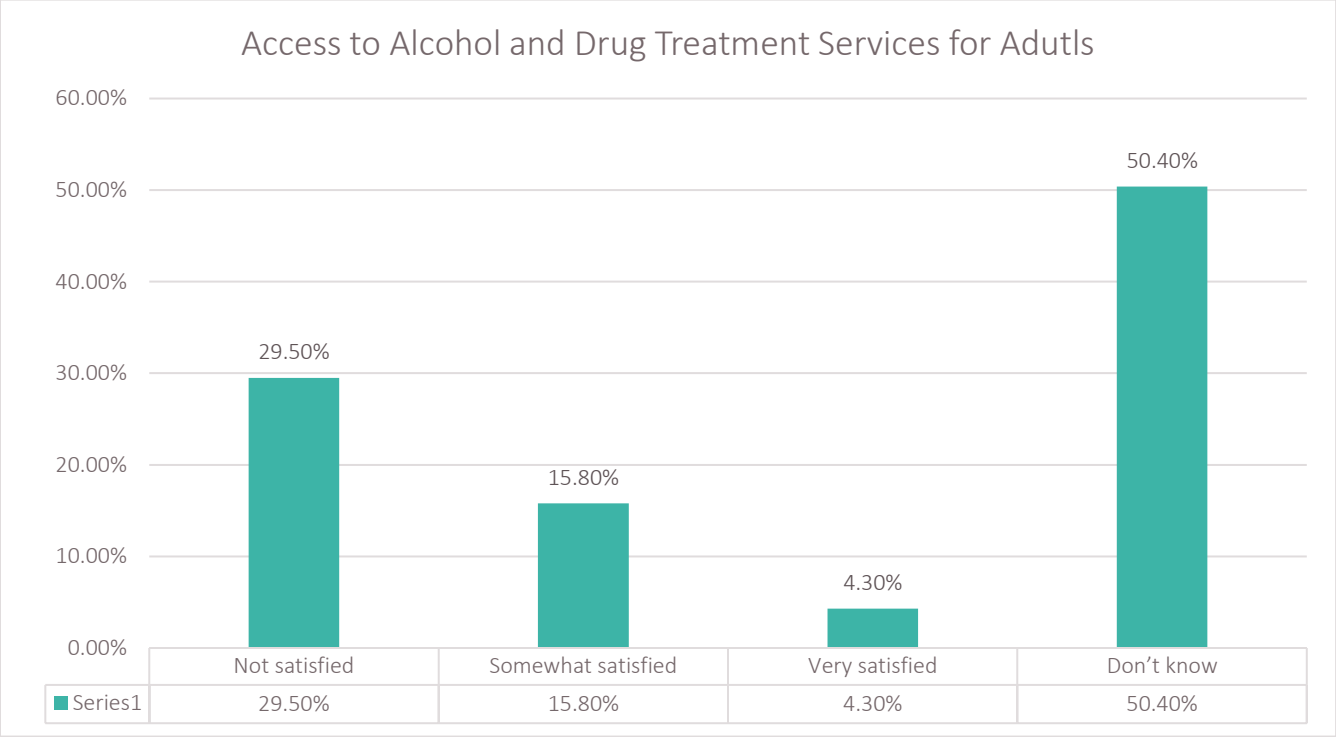
Question 46: How do you feel about the accessibility of health care or medical services for seniors (65+)? (Answered 391, Skipped 10)



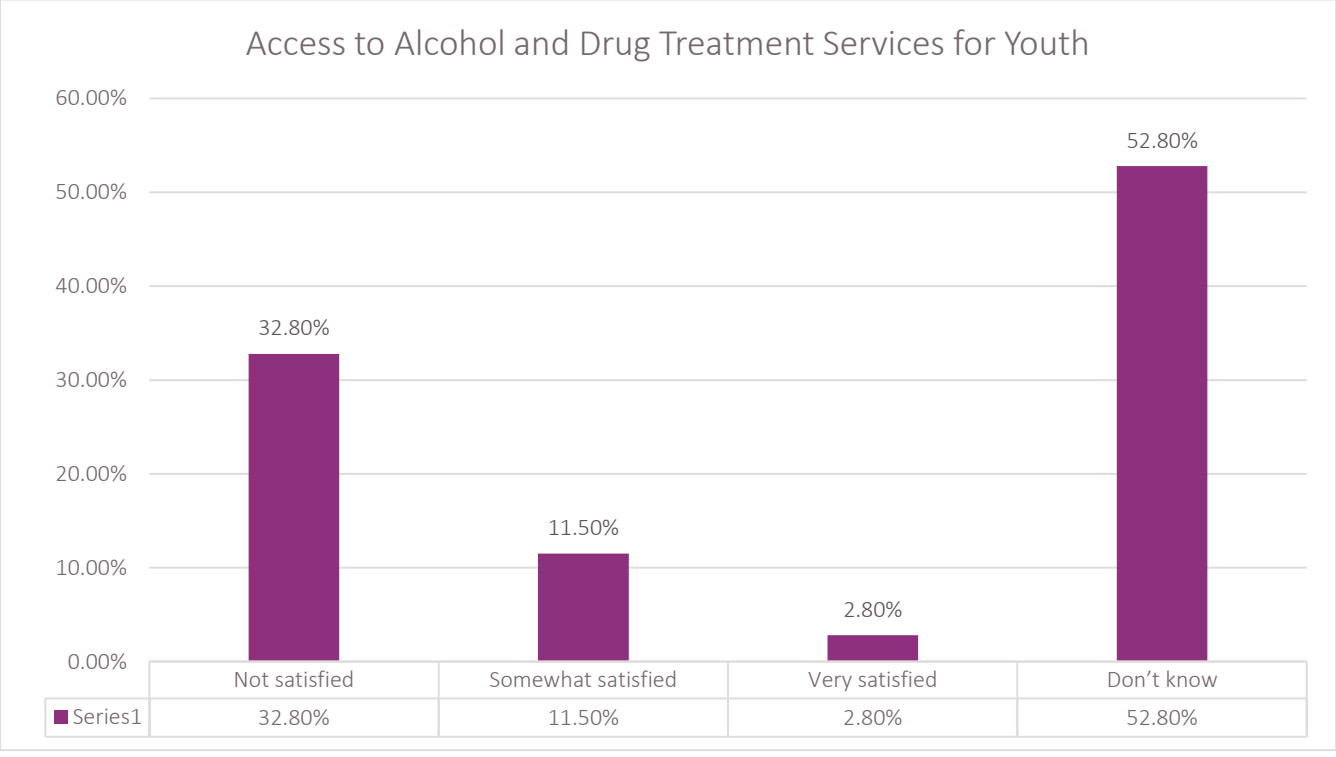
Question 47: How do you feel about the accessibility of mental health services for seniors (65+)? (Answered 392, Skipped 9)



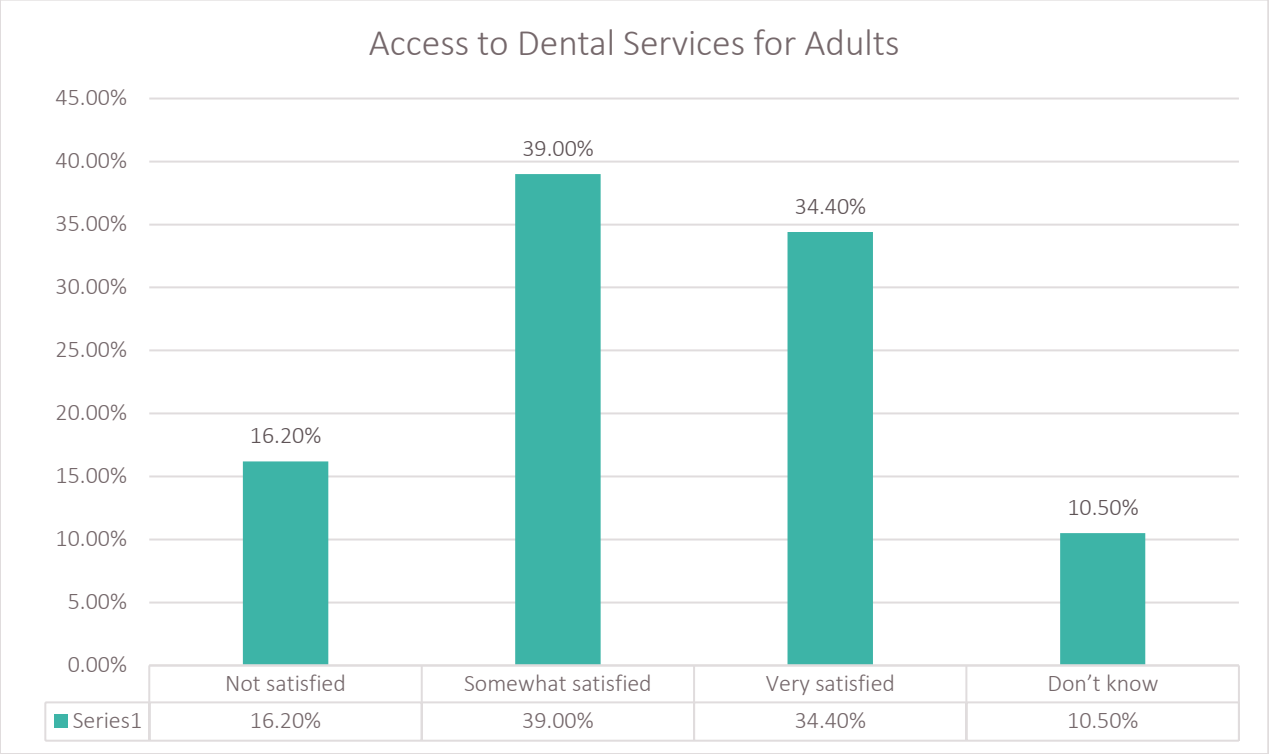
Question 48: How do you feel about the accessibility of alcohol or drug treatment services for adults? (Answered 393, Skipped 8)



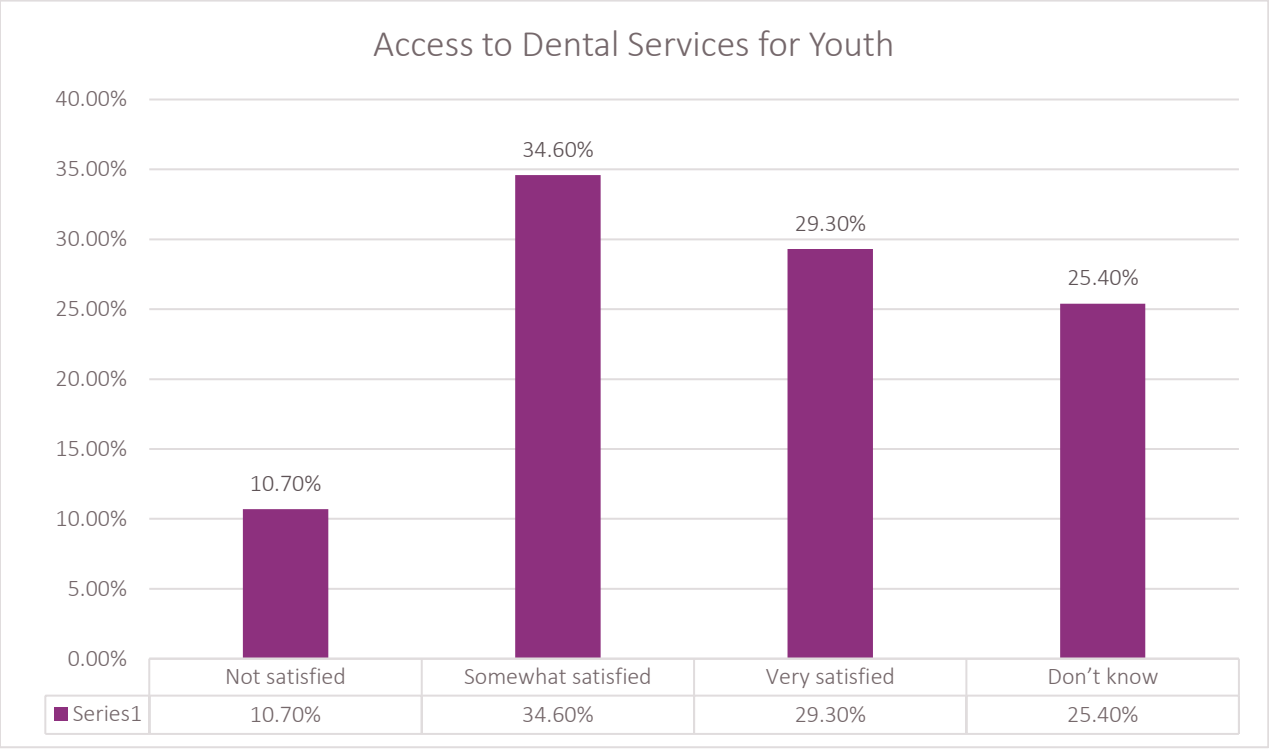
Question 49: How do you feel about the accessibility of alcohol or drug treatment services for youth? (Answered 390, Skipped 11)



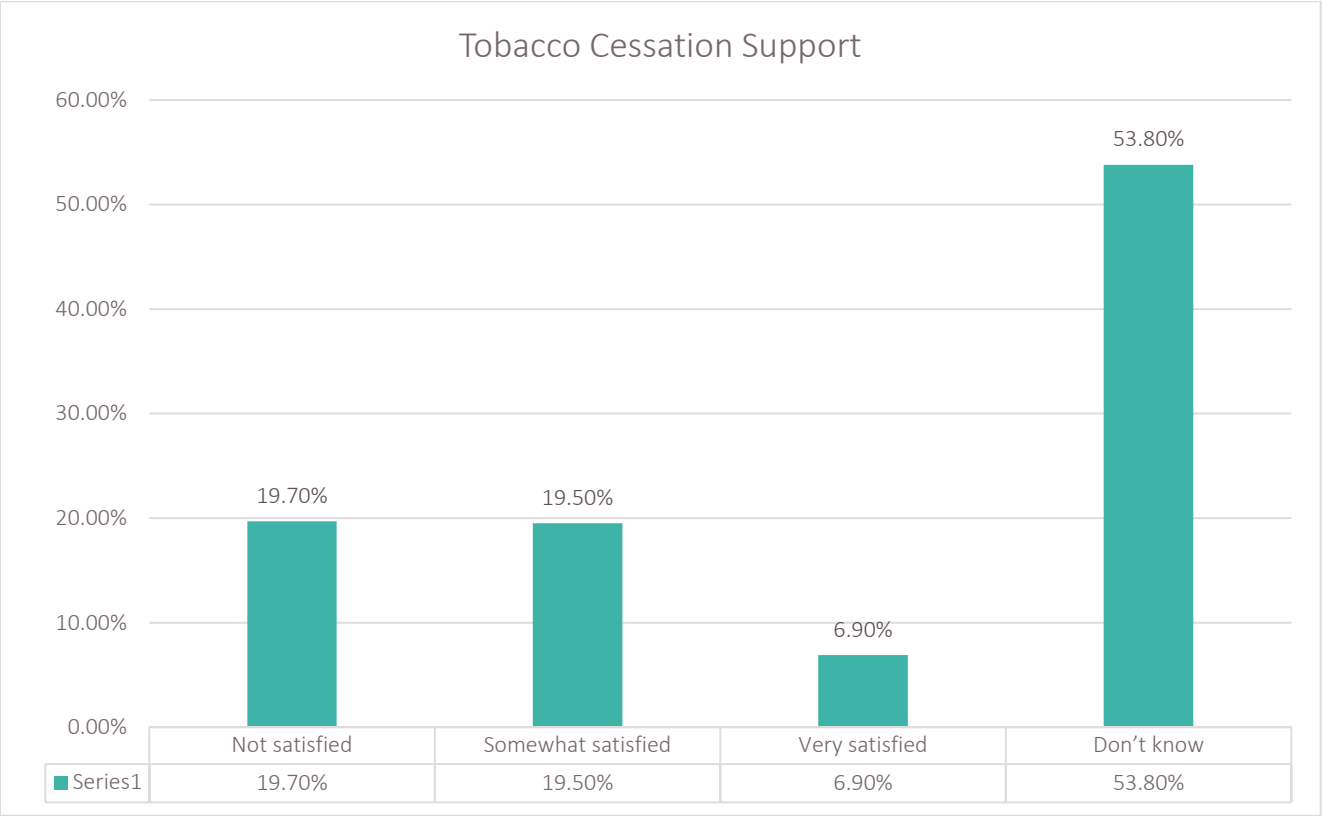
Question 50: How do you feel about the accessibility of dental services in the area for adults? (Answered 30, Skipped 11)



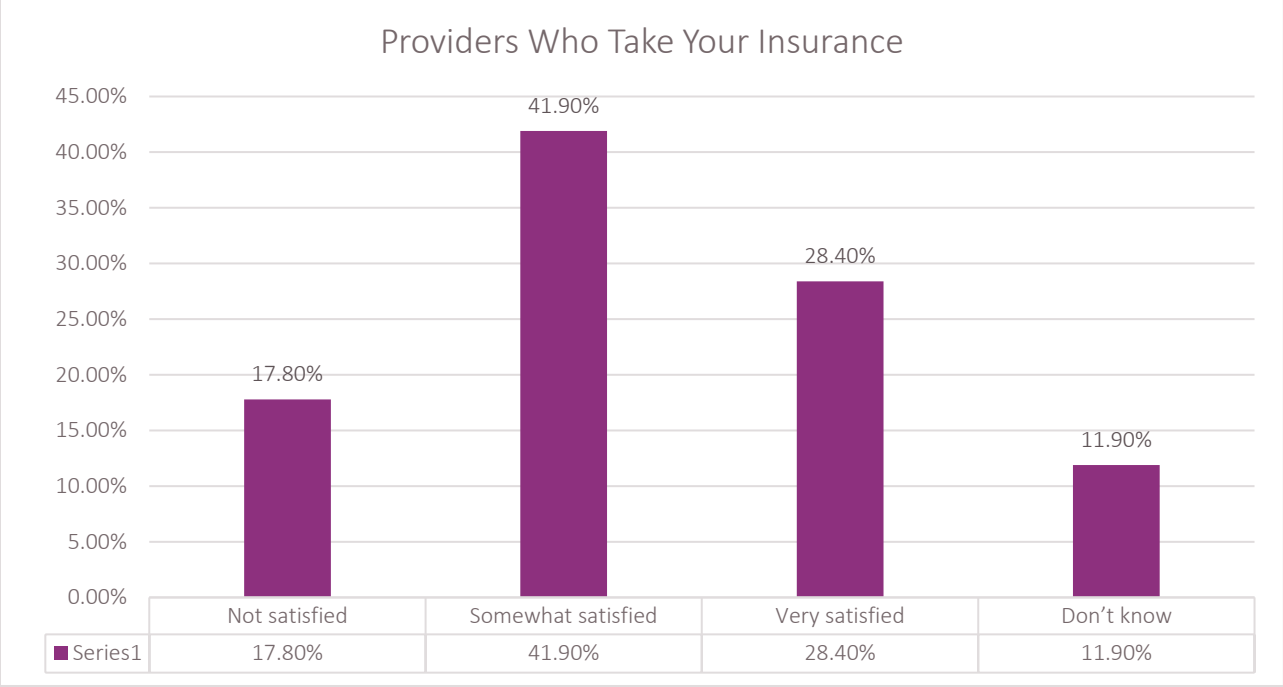
Question 51: How do you feel about the accessibility of dental services in the area for youth? (Answered 393, Skipped 8)



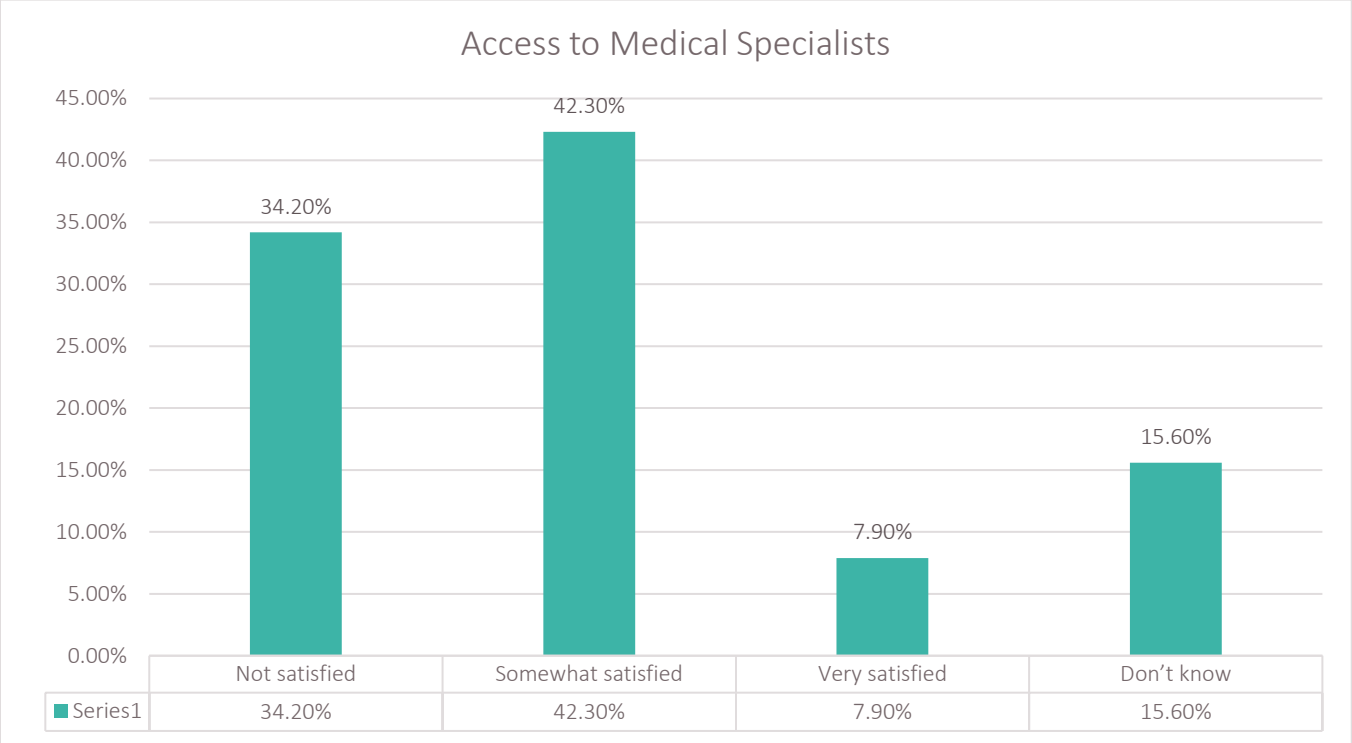
Question 52: How do you feel about accessibility of programs and services to help people quit smoking or other tobacco use? (Answered 390, Skipped 11)



Question 53: How do you feel about the accessibility of health care or medical providers who take your insurance? (Answered 394, Skipped 7)

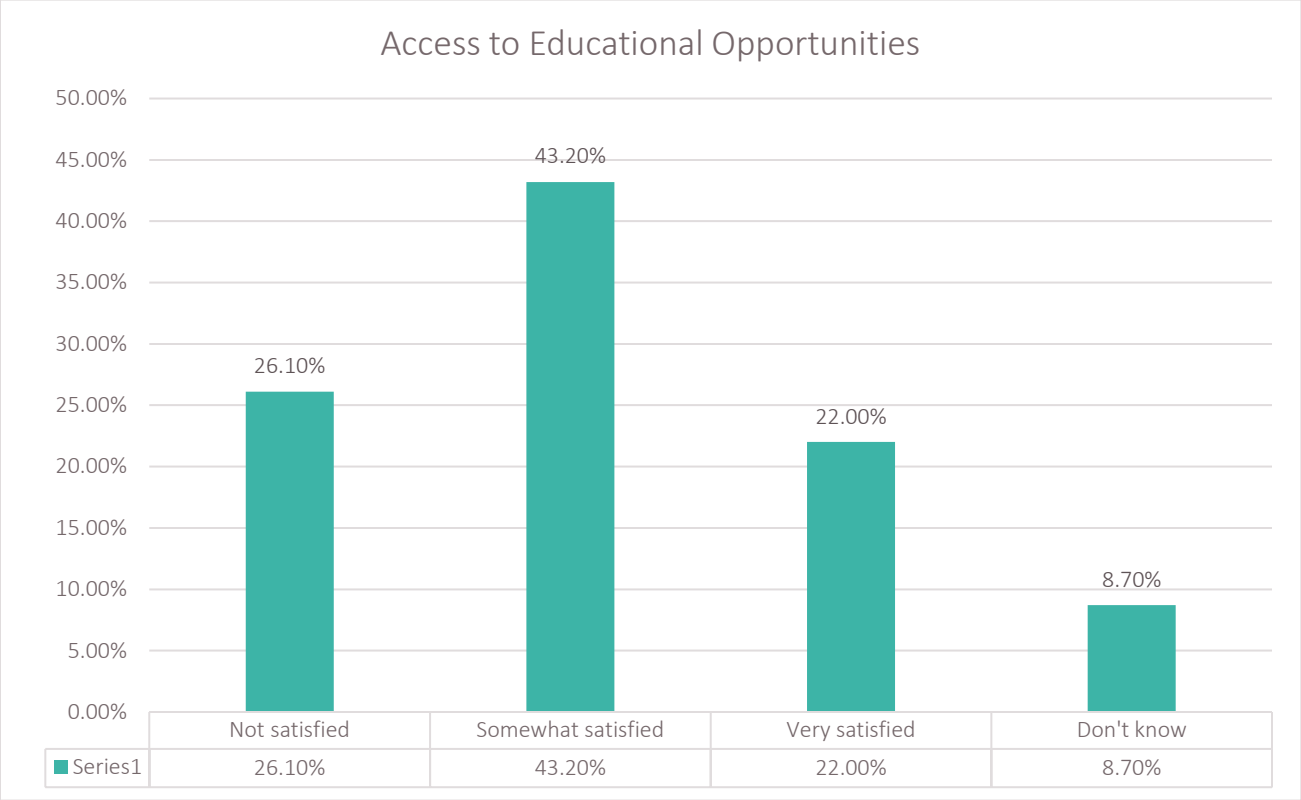


Question 54: How do you feel about the accessibility of medical specialists in the area? (Answered 392, Skipped 9)

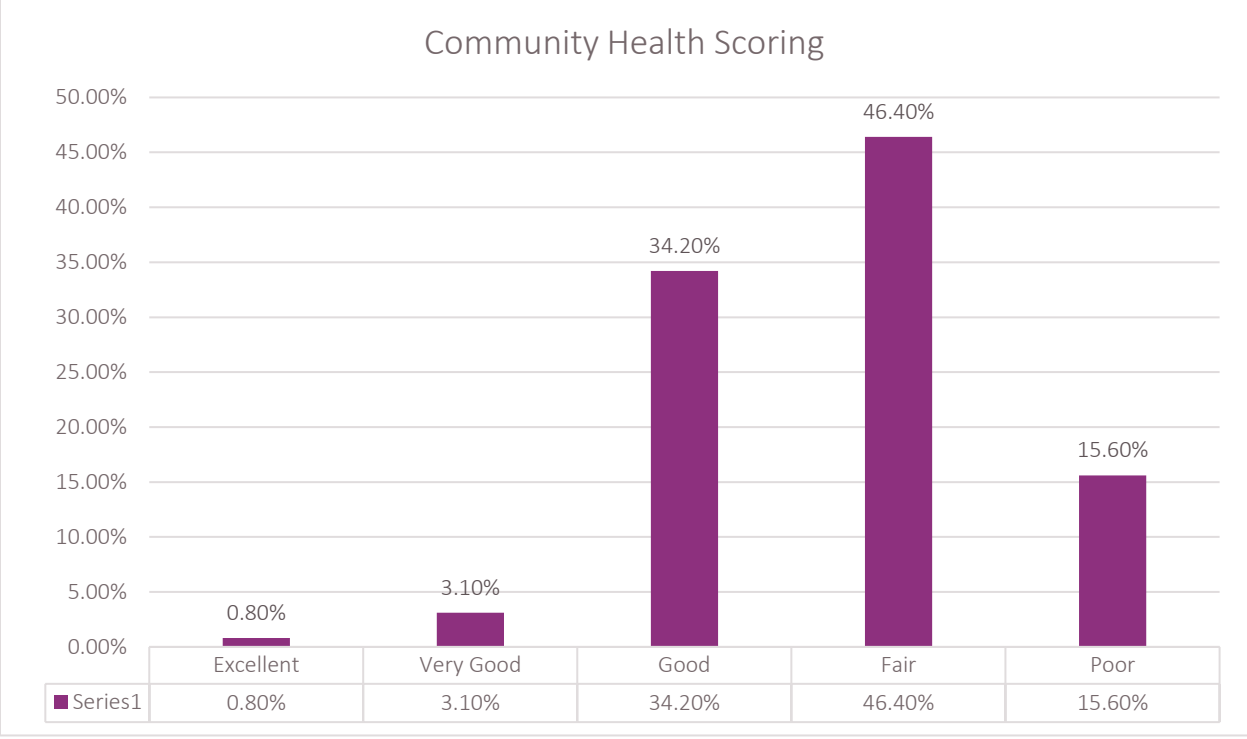


Question 55: How do you feel about the accessibility of living wage jobs in your community? (Answered 391, Skipped 10)

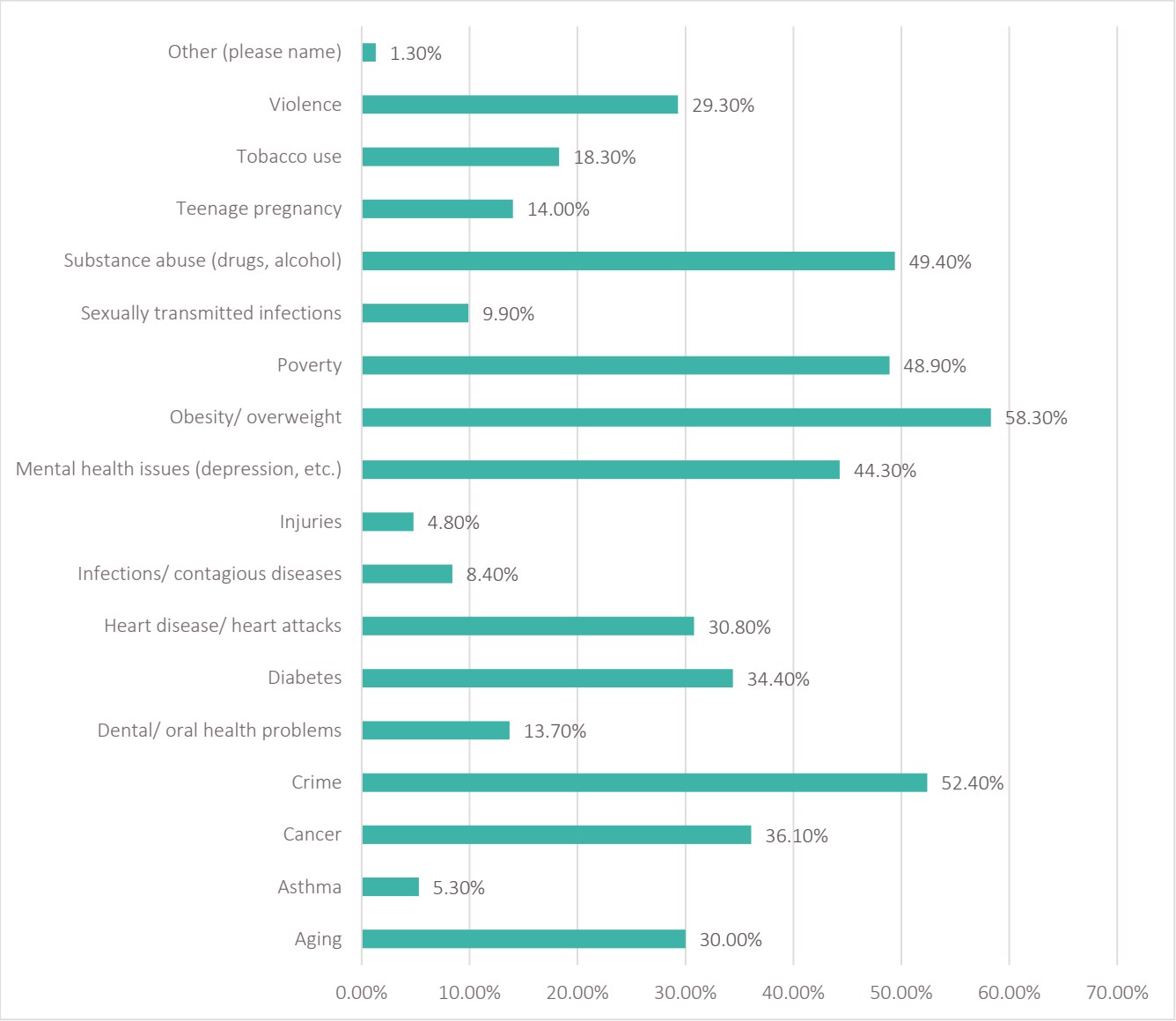
Question 56: How do you feel about the accessibility of educational opportunities in your community? (Answered 391, Skipped 10)



Question 57: How would you rate the overall health in your community (Answered 392, Skipped 9)



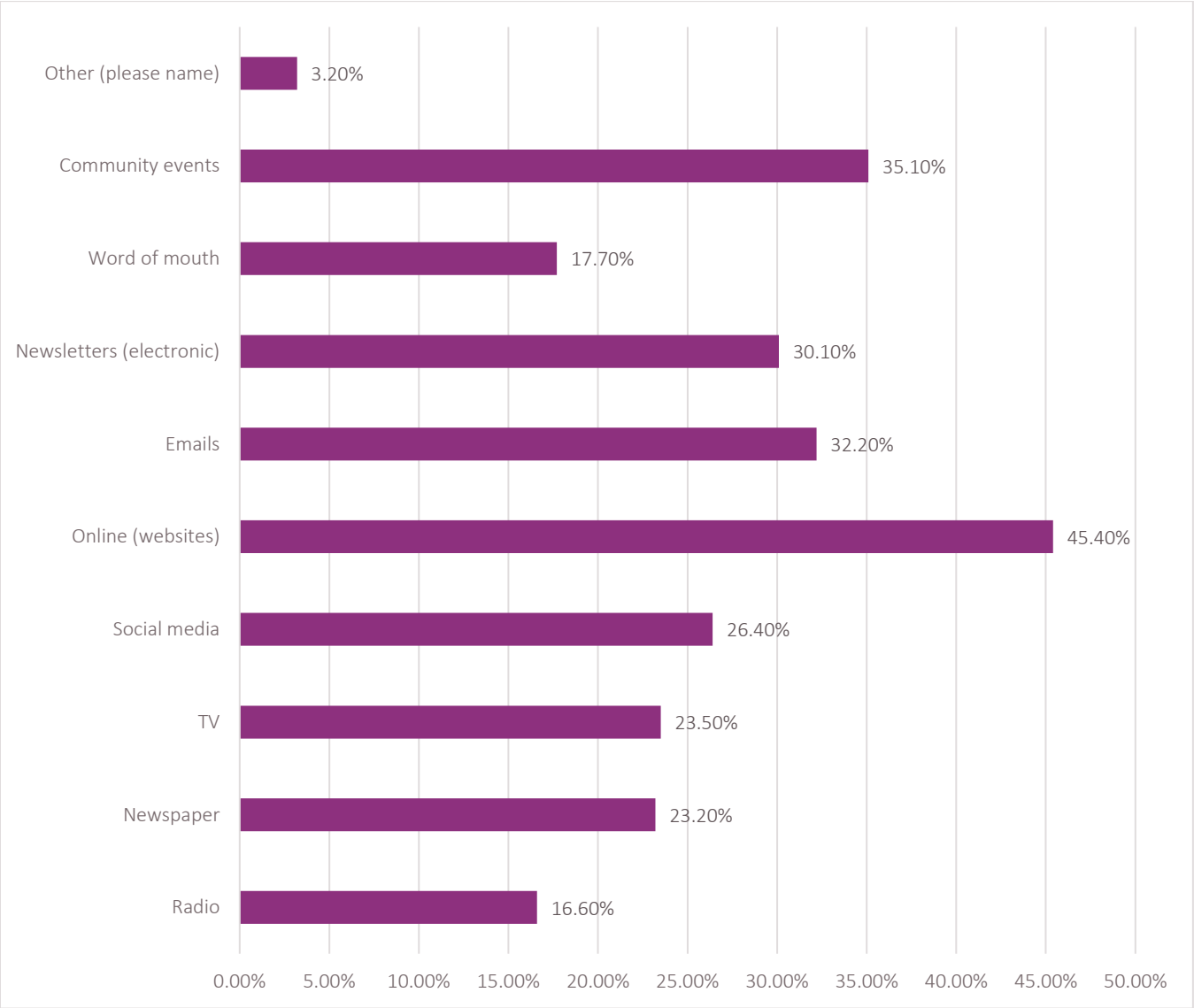
Question 58: What are the top 5 health issues that have the greatest impact on the community, as a whole (make 5 checks only)? (Answered 393, Skipped 8)



Other Responses:

- Hurting aches
- Suicide
- Kidney disease
- Unhealthy diet

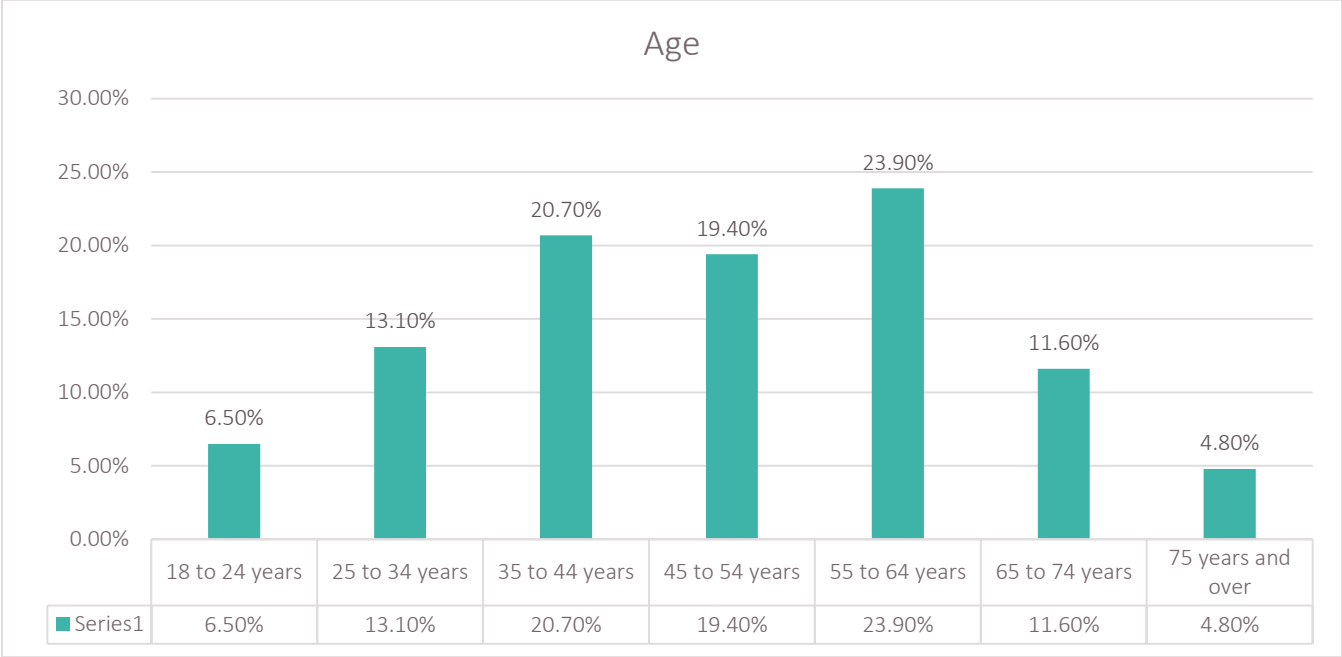
Question 59: Other than from your doctor, how would you prefer to receive health and wellness information? (Check ALL that apply) (Answered 379, Skipped 22)



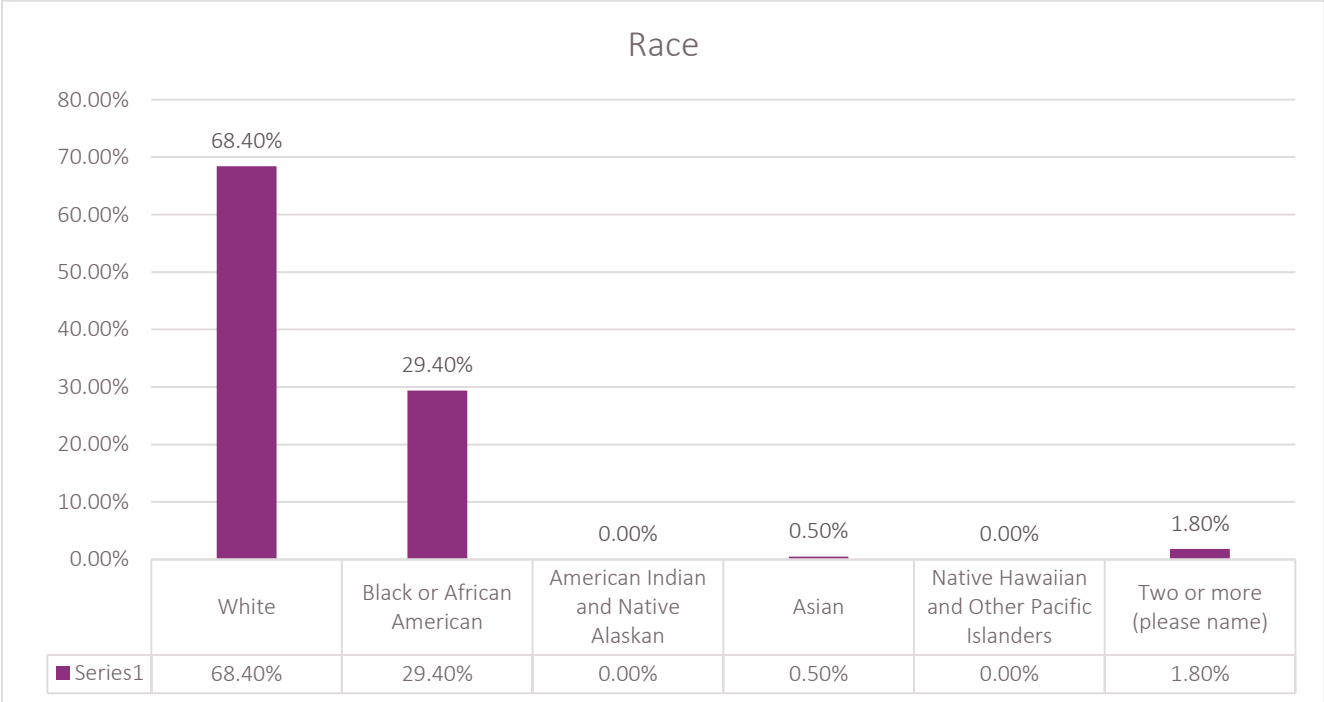
Other Responses:

- Regular mail (5)
- Hospital/ medical center sponsored workshops/ seminars
- Personal nurse coach
- Church
- Not at all (2)

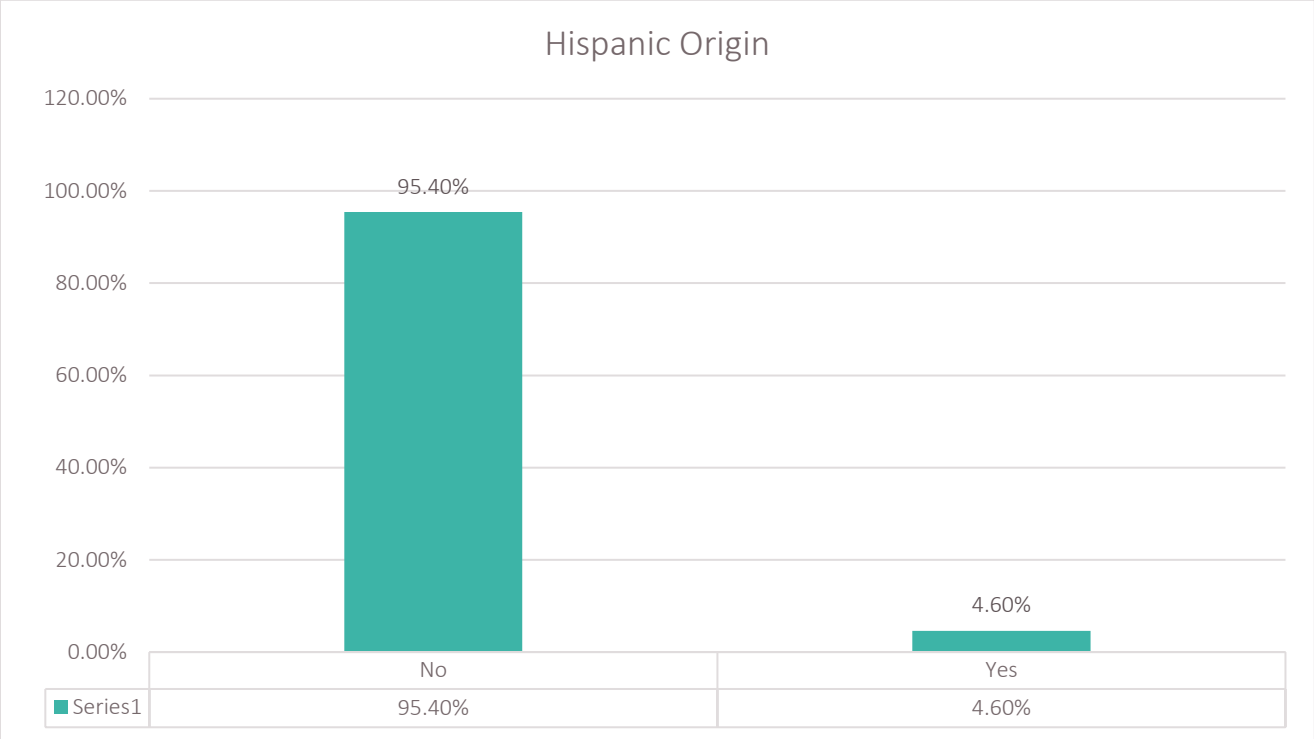
Question 60: What is your age? (Answered 397, Skipped 4)



Question 61: How would you classify your race? (Answered 395, Skipped 6)



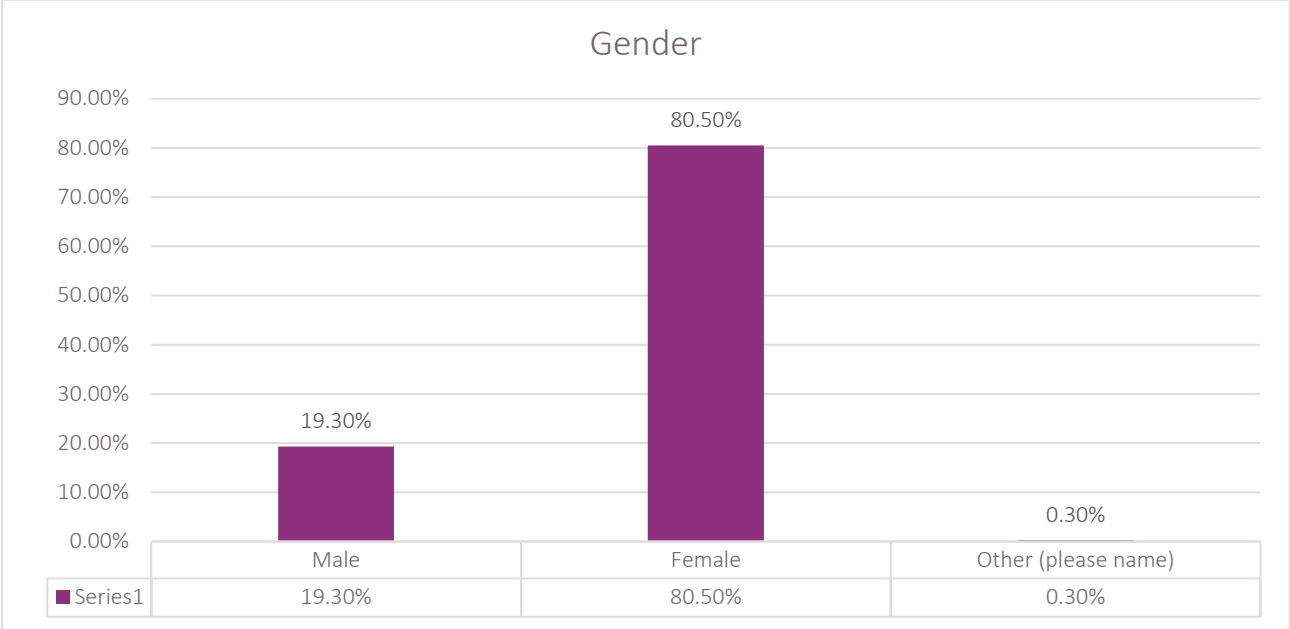
Question 62: Are you of Spanish, Hispanic or Latino origin? (Answered 390, Skipped 11)



Question 63: What do you consider your ethnicity (Akan, East Indian, Fijian, Chicano, Mexican American, Cherokee or other enrolled or principle tribe, etc.)? (Answered 152, Skipped 249)

- Cherokee
- Mexican
- Black
- French
- White
- Irish
- African American
- Greek
- Native
- European
- Caucasian

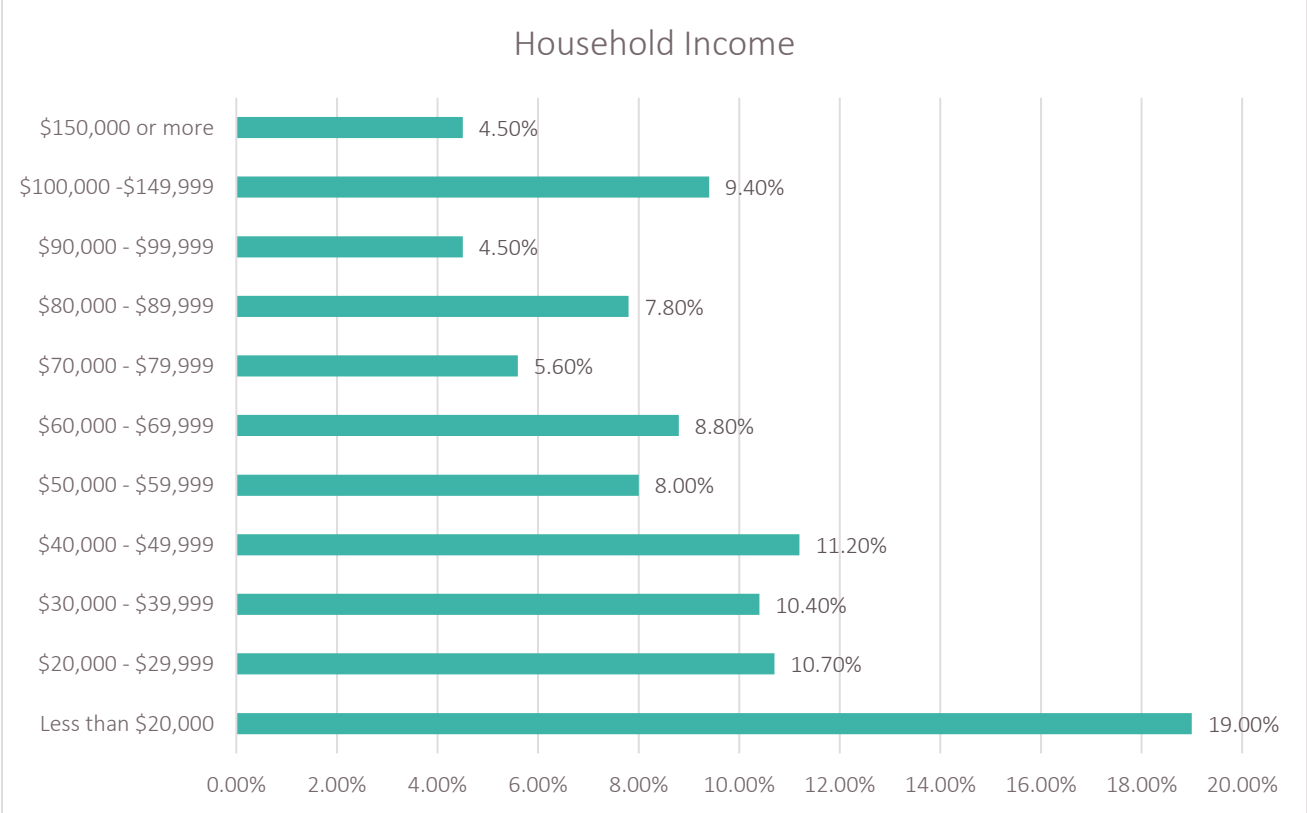
Question 64: What is your gender? (Answered 394, Skipped 7)



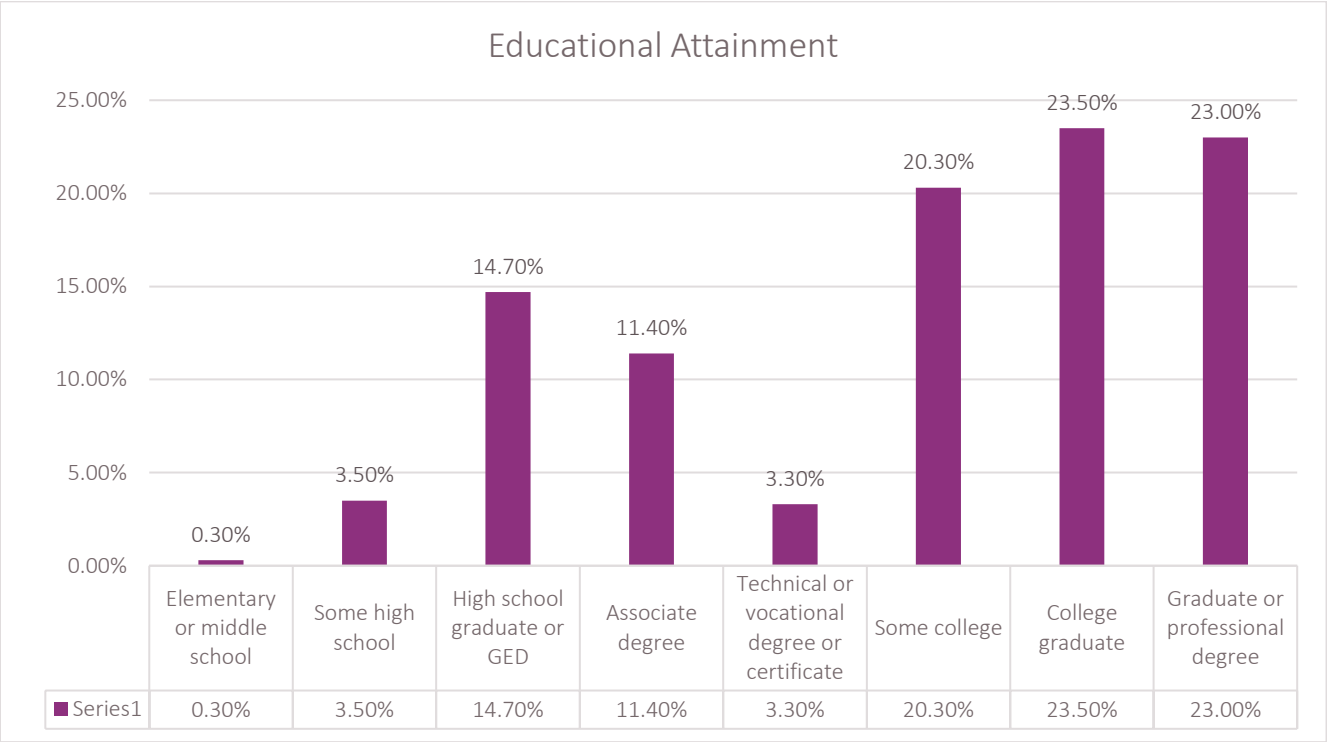
Other Response:

- Non-binary

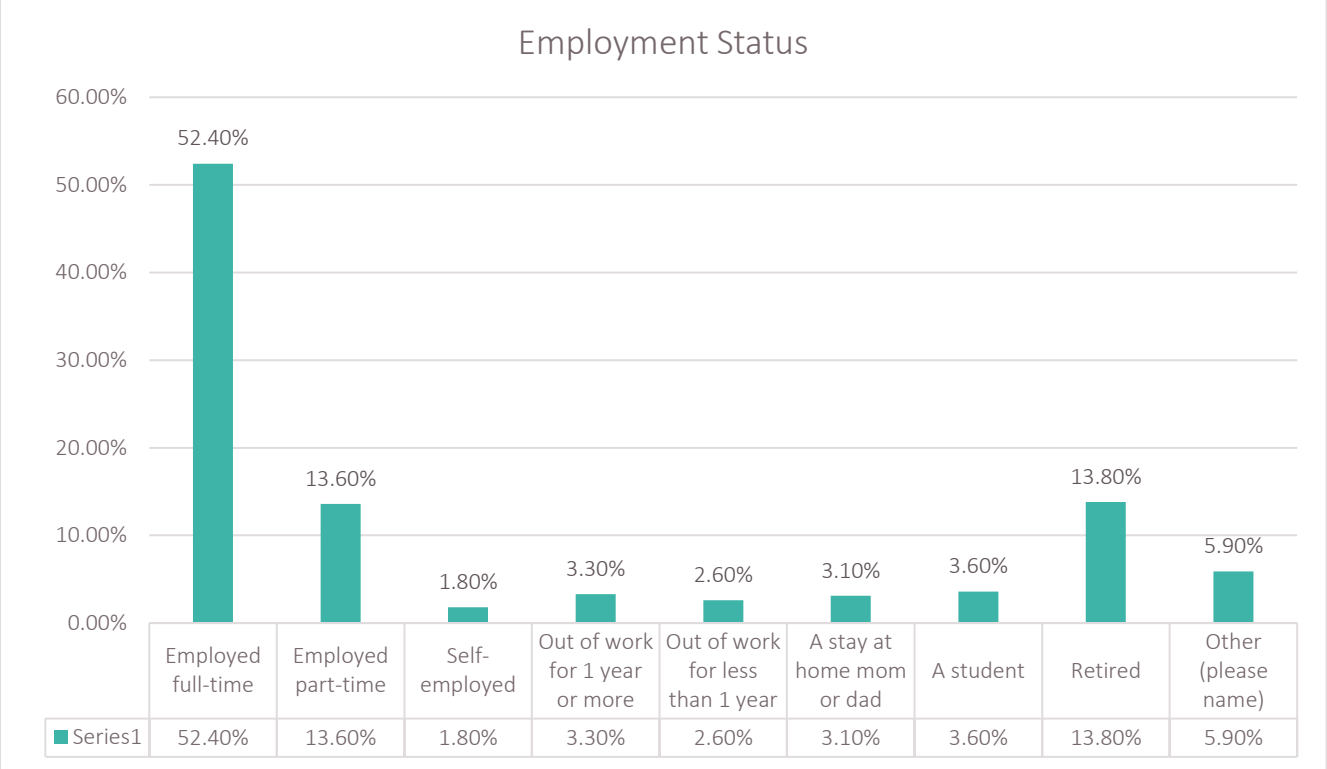
Question 65: What was your household income (the combined income of everyone in your household) last year? (Answered 374, Skipped 27)



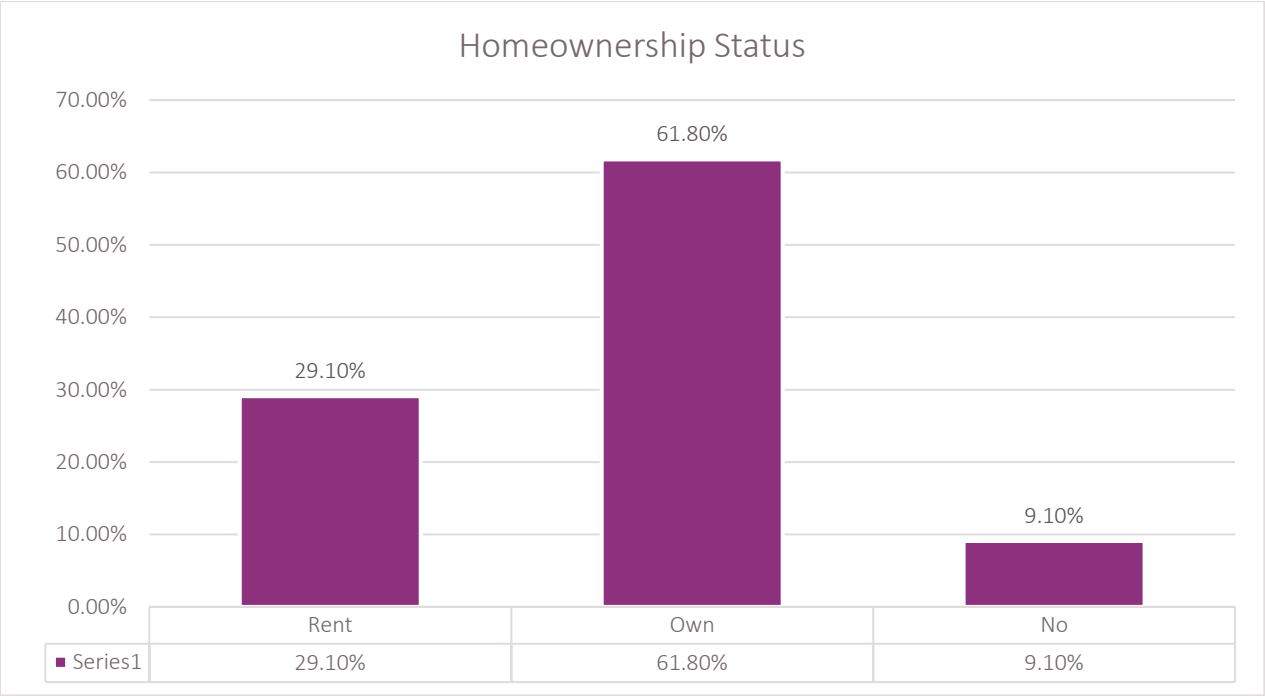
Question 66: What is your highest level of education? (Answered 395, Skipped 6)



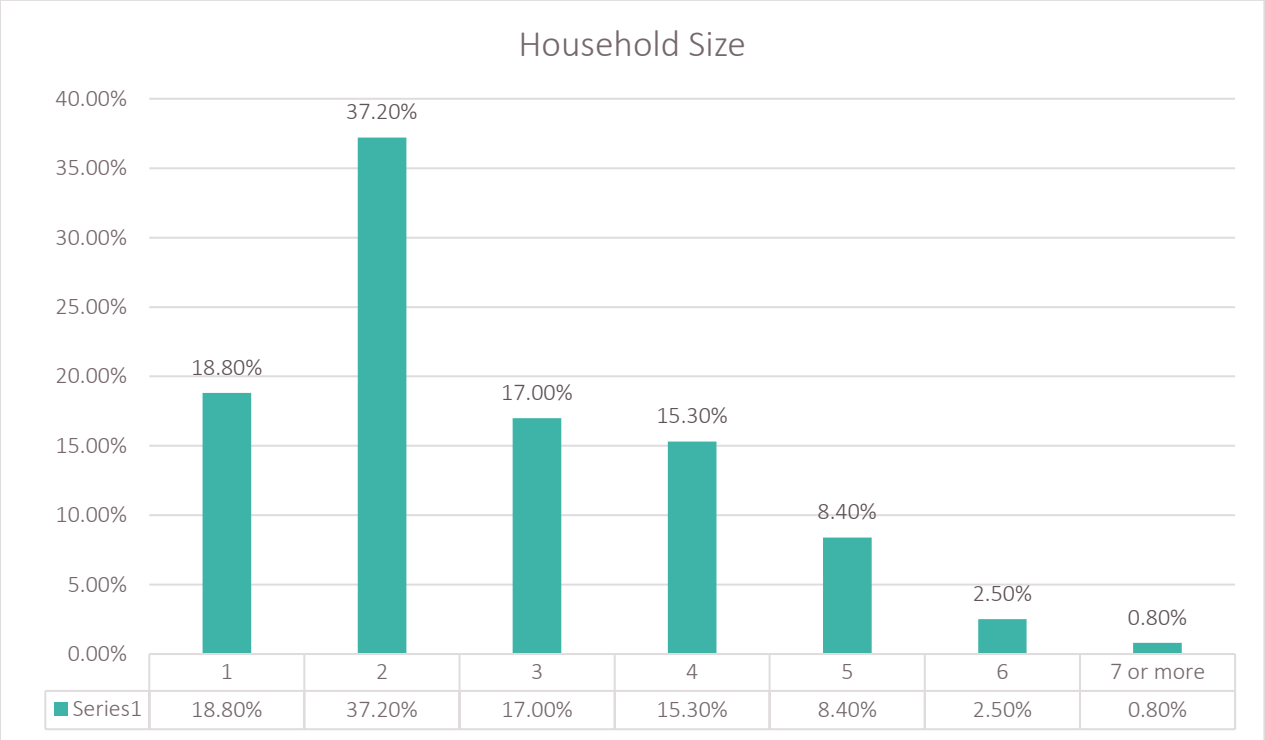
Question 67: What is your employment status? (Answered 395, Skipped 6)



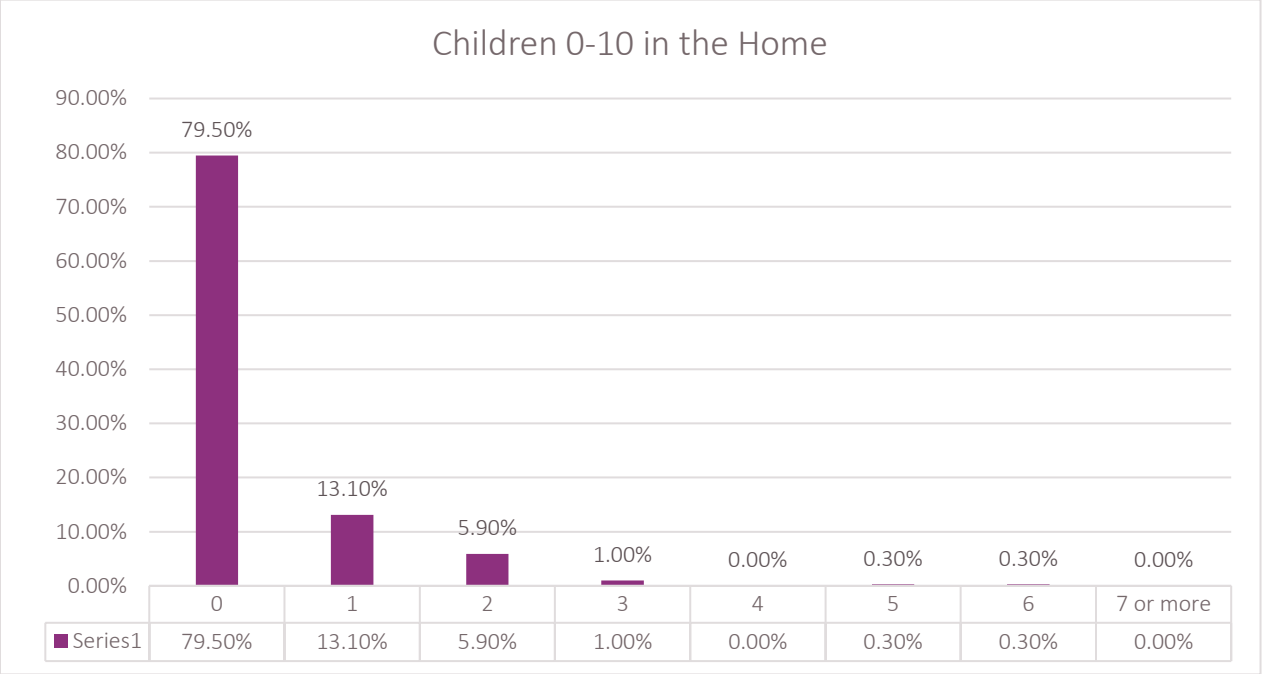
Question 68: Do you currently rent or own your home (apartment, house, mobile home, etc.)? (Answered 395, Skipped 6)



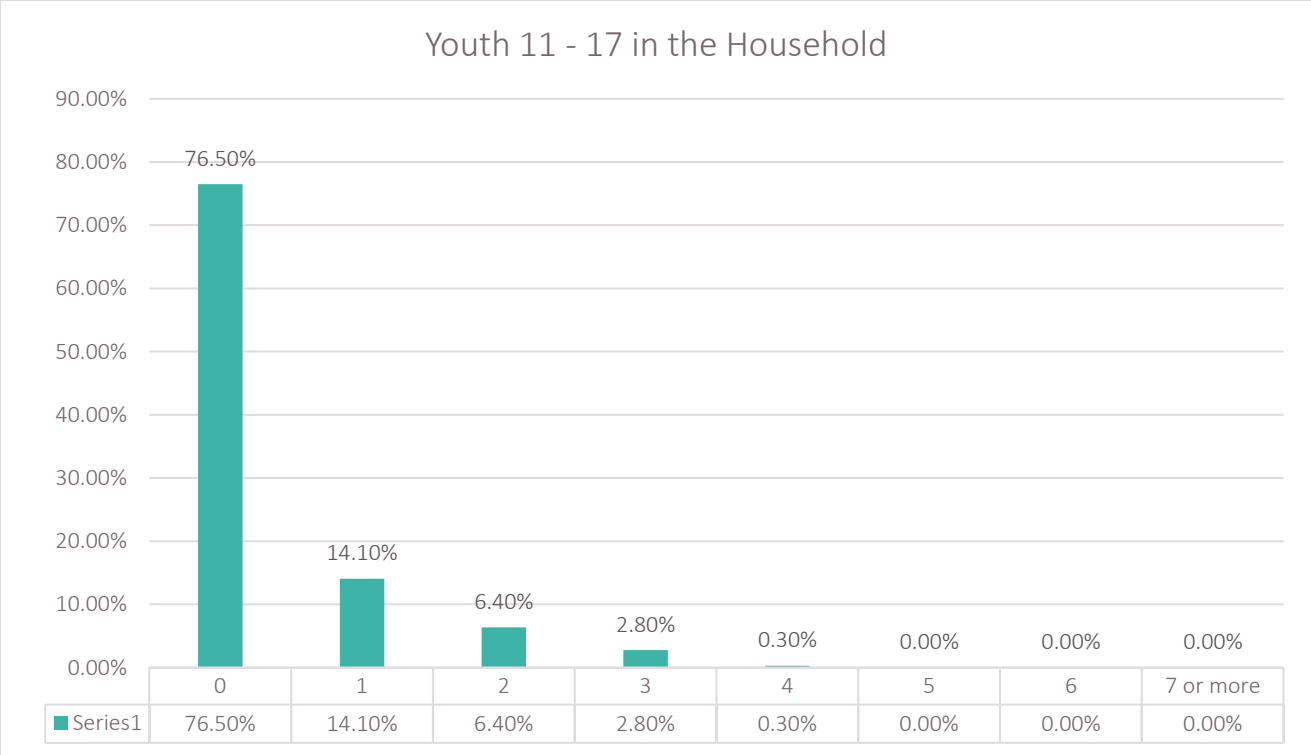
Question 69: How many people live in your household, or where you stay most of the time (including yourself) (Answered 393, Skipped 8)



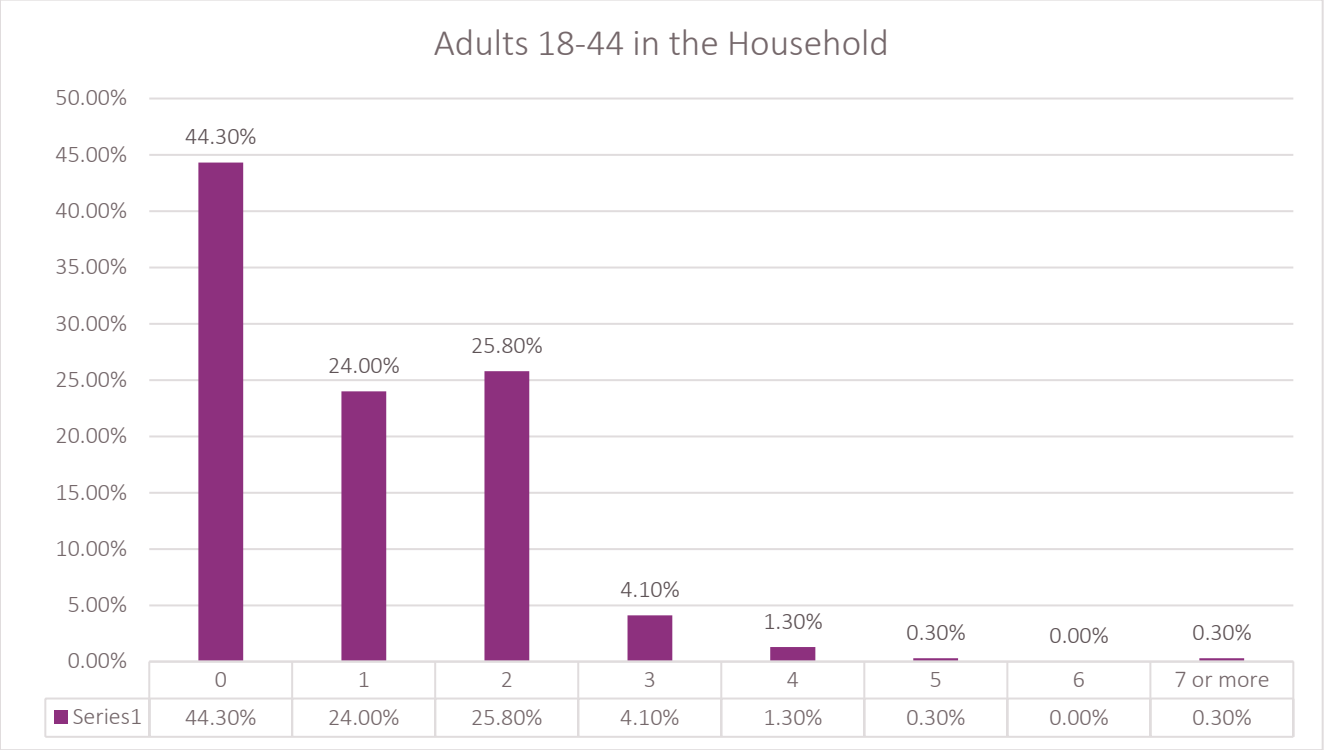
Question 70: Of those who live in your household, or where you stay most of the time, how many are 0 (Newborn) to 10 years old? (Answered 390, Skipped 11)



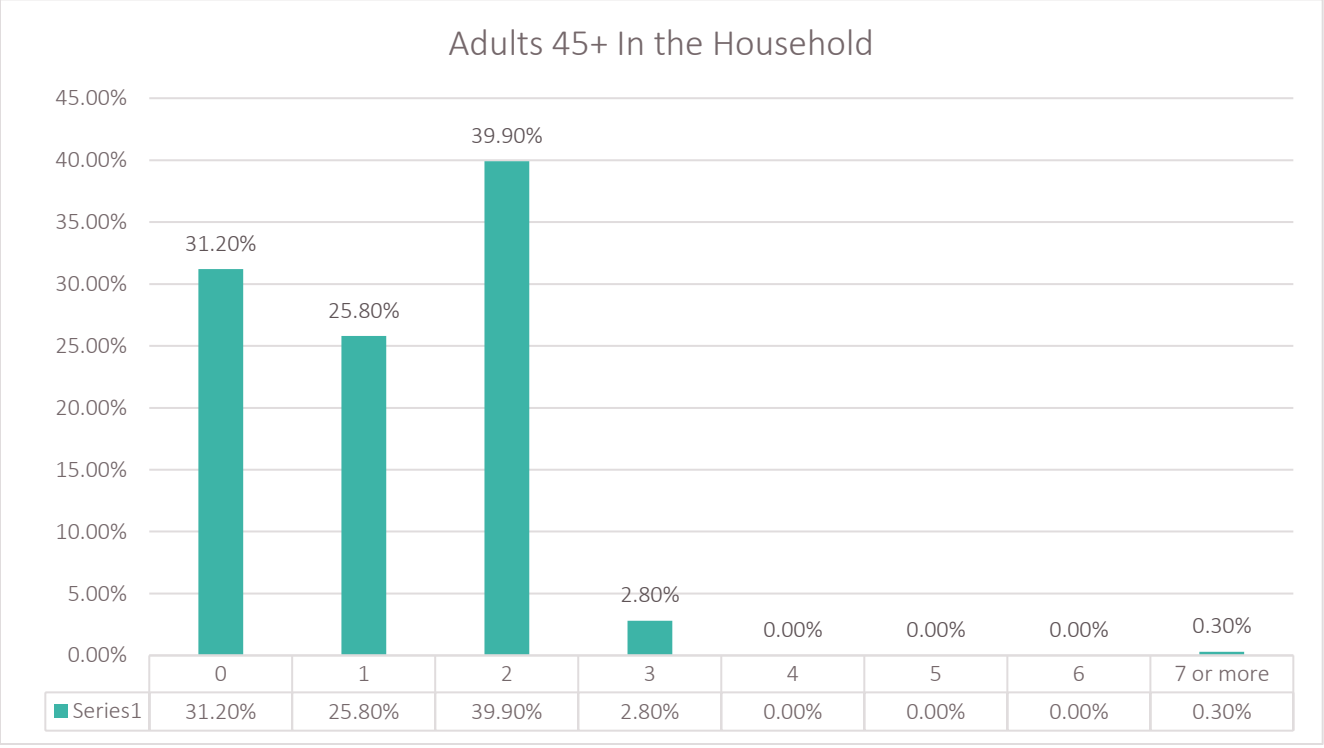
Question 71: Of those who live in your household, or where you stay most of the time, how many are 11 to 17 years old? (Answered 391, Skipped 10)



Question 72: Of those who live in your household, or where you stay most of the time (including yourself), how many are 18 to 44 years old? (Answered 388, Skipped 13)



Question 73: Of those who live in your household, or where you stay most of the time (including yourself), how many are 45 years old or older? (Answered 391, Skipped 10)



Key Informant Interviews

Fifteen key informant interviews were conducted throughout the Dan River Region, including Caswell County, NC as a part of the community health needs assessment and health equity report process. The Key informant interviews were designed to collect the perspective of providers and community leaders. To ensure a regional and local view, three key informant interviews were conducted for each of the following service regions:

- City of Danville
- Caswell County
- Pittsylvania County
- Danville – Pittsylvania
- Dan River Region (Danville, Pittsylvania, Caswell).

Major Themes from Interviews

Hard to reach people in need

- Rurality – hard for organizations to reach out to rural community because— lack of resources
- Hard for people in rural areas to access healthcare, services (e.g., senior centers) in more urban areas
- Need to reach people with highest need

Equity Issues

- inequity in who has access to opportunities
- Impacts of generational poverty
- Lack of trust compounded by cultural dynamics
- Still segregated by systems and policies of the past
- Have not healed from the past

Education

- More parents getting engaged in schools
- School suspension rate decreasing
- Lots of high school drop-outs—affects education level and health
- Kids are not ready to learn
- Kids not receiving preventive services and treatment (eye care, dental work) – will have long-term health effect

Collaboration

- Organizations/government agencies are partnering and collaborating; People willing to partner and work together
- Territorialism negatively impacts partnerships; organizations are “afraid of losing their identity”
- There is more of a “collective mindset” about issues that need to be addressed
- Regional approach is not always popular, but can help create demand and a critical mass to make changes
- Should work better together to prevent duplication

- Must align efforts and leverage resources

Community Engagement is Lacking

- Isolation of those who need services most
- Isolation – people in the community "do not feel as though they belong in the conversation"
- Communication is not good with those who are most under resourced
- People untrusting of the transformation currently experiencing
- Unless basic needs met, community members won't be as engaged as people think they should be
- "We need a rallying point to bring everyone on board or we will be leaving people behind again"
- Should invest and believe in and take responsibility for ourselves
- "A healthy community is an engaged community"
- Need to show effectiveness to get community engaged; need to measure impact; "success yields success"
- Need to inform people about initiatives
- Need to go to people -- Can reach people through churches, local community organizations (e.g., fire department)
- Must meet people where they gather and build trust. Help them grow and succeed – don't tell them what to do or try to fix them
- Make the community part of planning and implementation
- Regarding those served by social and health service— "don't plan about them without them"
- Provide leadership opportunities in neighborhoods
- Cannot have only agenda-drive conversation
- The community wants to be part of the solution, not treated like a symptom
- People stay engaged if they see potential results and understand what's being done – need to celebrate progress too

Community as an asset

- Community is resilient
- Family members support each other
- People are hard-working
- People have pride and want to be independent; have perseverance
- People want their families to live a good life
- Volunteers (i.e., EMS volunteers) are an asset
- Have "very committed leaders" in business, private sector, foundations, non-profits, government who recognize challenges and put solutions in place

Factors affecting health and healthcare/ health concerns

<u>Transportation</u>

- People need it to access health care and jobs
- In Pittsylvania County, no public transportation system; people in need of services often don't have access to a car

Access to food

- Food deserts are real
- Caswell County – has farmers but food doesn't stay in the county—need food system to keep food local
- Southern influence on diets

Access to physical activity

- Improvements being made by/to parks and recreation that increases access to places to be physically active
- Need to increase walkability in Yanceyville and Milton
- Lack of physical activity for youth who are not athletic

Health and social services

- Lack of knowledge about resources and how to connect to them – promotion of services needed
- Lack of mental health care
- People falling through the cracks even when services offered
- Need for more services for low-income youth and elderly
- Health care not affordable for everyone – safety net clinics are under-resourced and working at full capacity
- How long will clinics be able to treat those who can't pay?
- People don't have money to take preventive actions
- Local hospital doesn't have good reputation – needs to change so people will seek care there
- Need for more health education, especially about prevention and importance of healthy lifestyle; low-income populations need education on how to prepare healthy foods – but not always able to afford healthy food or a healthy lifestyle
- Hard to recruit trained personnel to come to the area; especially specialists
- Caswell County – no hospital or urgent care facility
- Dental Services needed
- Need one stop kind of place to get services; wrap-around services
- ED only option for some people; use it for primary care; call 911 for transportation – only way to get care; "frequent flyers" who are not getting adequate care in the community;
- Hopeful that CHWs will help connect people to primary care and reduce use of ED

Other concerns affecting health:

- Drug abuse a growing problem (use of more serious drugs)
- Crime and gangs
- Poverty – generational poverty
- Low health literacy
- Housing conditions deteriorating – long list for public housing
- African-American community feels the greatest impact of health concerns
- Need for parental support; especially for single parent households
- Pursuit of power and control; fear of poverty, fear of violence, fear of people different than you

Disease Concerns

- Obesity, diabetes, heart disease, hypertension, substance abuse, mental health issues, arthritis, teenage pregnancy

Capacity Limitations

- Organizations working on health issues but not enough resources for the scale needed
- Under-resourced community
- Everyone working at capacity
- Because of a lack of resources, people work extra hard (e.g. school teachers)
- Basic needs are not being met for some people – good food, good education
- Service organizations fighting each other for funding

Local Economy and Economic Development

- Economy is changing – can no longer rely on one big industry
- Lack of good jobs
- Causes population loss – especially young people
- Cost of living lower in region
- Lots of high school drop-outs – affects education and health
- People in a lot of debt for medical expenses
- Trying to attract millennials by improving park and rec opportunities, and educational and economic opportunities
- Need to provide training in advanced manufacturing
- There is a lack of connection between people and place—need to change what people see and feel when they interact with Danville and the region
- Potential businesses don't find an employable workforce in the area – need for job services
- Have to improve health for region to succeed as a whole
- Need to work on health and quality of life issues to make it desirable for businesses
- How do we empower the next generation of leaders?

Other Themes

- Need for open-mindedness
- New open-minded leaders are an asset – exploring new opportunities, building relationships and encouraging participation
- Community doesn't feel ownership over itself
- Under resourced populations are those that live-in poverty, regardless of race or ethnicity
- Challenge is the tradition of how things have always been done – "we stand in our own way sometimes"
- People feeling increased anxiety about homelessness and repeal of ACA
- Those who need services are in the "survive before thrive" mindset
- There is a greater awareness of a need for a healthy community – "Health Collaborative largely responsible for that"
- Readmissions to ED due to noncompliance

Focus Groups

Five focus groups where conducted throughout the Dan River Region, including Caswell County as part of the community health assessment and health equity report process. Two focus groups were held in the City of Danville, one in the town of Yanceyville, one in Chatham, and one in Gretna.

Focus Group Location	Number of Participants
Caswell	12
Danville #1	6
Danville #2	16
Chatham	12
Gretna	11

Each focus group lasted for 1 ½ hours with the same questions and voting activity being completed. A blank focus group facilitators guide can be found at the end of this report. Below are the common themes, repeated phrases, issues that are impacting community health and barriers to good health that were compiled from the responses in all five focus groups.

Question 1: What does being healthy mean to you?

- To not be sick
- Health is not impacting life in a bad way
- Being engaged and active
- Being strong
- Having balance in life
- Mobility
- Eating well
- Being active/ exercise/ physical activity
- Always able to learn
- Being able to work to provide for family
- Having energy
- Good Quality of life

Question 2. What do you think of when you hear "healthy community"?

Question 3: What does being physically active mean to you?

- Going to the park
- Sports, basketball
- Walking on the trail and in the neighborhood
- Going to the gym regularly
- Not sitting around all day – moving around
- Getting that heart rate up
- Running and biking
- Sweating
- Hiking and chasing after young children
- Regular activity not just once in a while
- Group classes
- Moving, just remember to keep moving
- Recreation – sports team, up gym time
- Exercise 3 to 5 times per week

Question 4: What does eating healthy mean to you?

- Vegetables and fruit
- Cutting back on sugar and soda
- Eating 3 meals and not skipping breakfast
- Eating clean ingredients from the fruit and vegetable section
- The opposite of fast food
- Watching sugar and salt
- Not eating too much in one sitting (portion control)
- Eating when hungry and not just because
- Following the food triangle suggested servings
- Home cooked meals, not meals from a box
- Drinking water
- Food from the garden and not too much candy and sweets
- Lots of colors on the plate

Activity: Each participant will get 5 dots to vote on the question below (taken directly from the Community Health Survey)

1. What are the top 5 health issues that have the greatest impact on the community as a whole (make 5 checks only)?

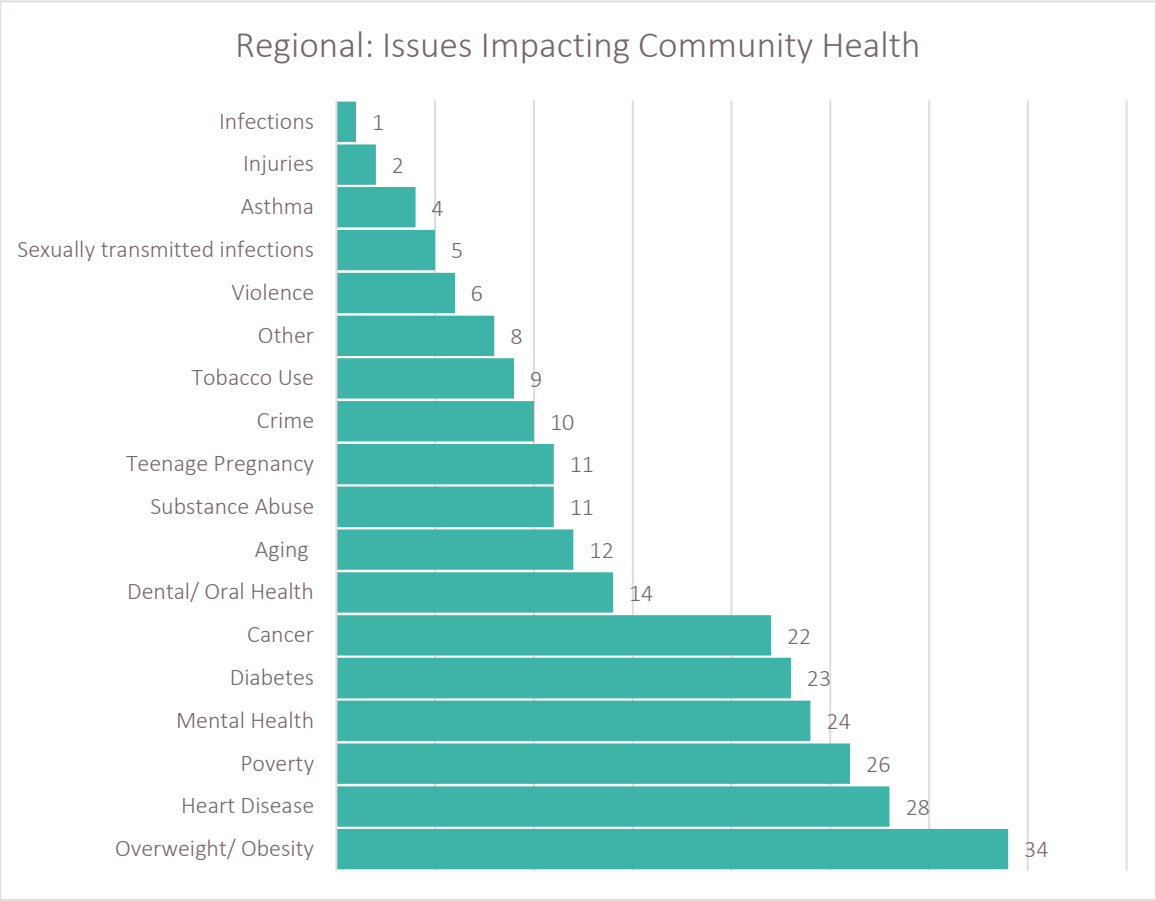
- ☐ Aging
- ☐ Asthma
- ☐ Cancer
- ☐ Crime
- ☐ Dental/ Oral Health
- ☐ Diabetes
- ☐ Heart Disease
- ☐ Infections
- ☐ Injuries
- ☐ Mental Health
- ☐ Overweight/ Obesity
- ☐ Poverty
- ☐ Sexually transmitted infections
- ☐ Substance Abuse
- ☐ Teenage Pregnancy
- ☐ Tobacco Use
- ☐ Violence
- ☐ Other

Overall Results:

Upon combining the results from each focus group, the top 5 health issues that have the greatest impact on the community per the focus groups participants are:

1. Overweight / Obesity
2. Heart Disease
3. Poverty
4. Mental Health
5. Diabetes

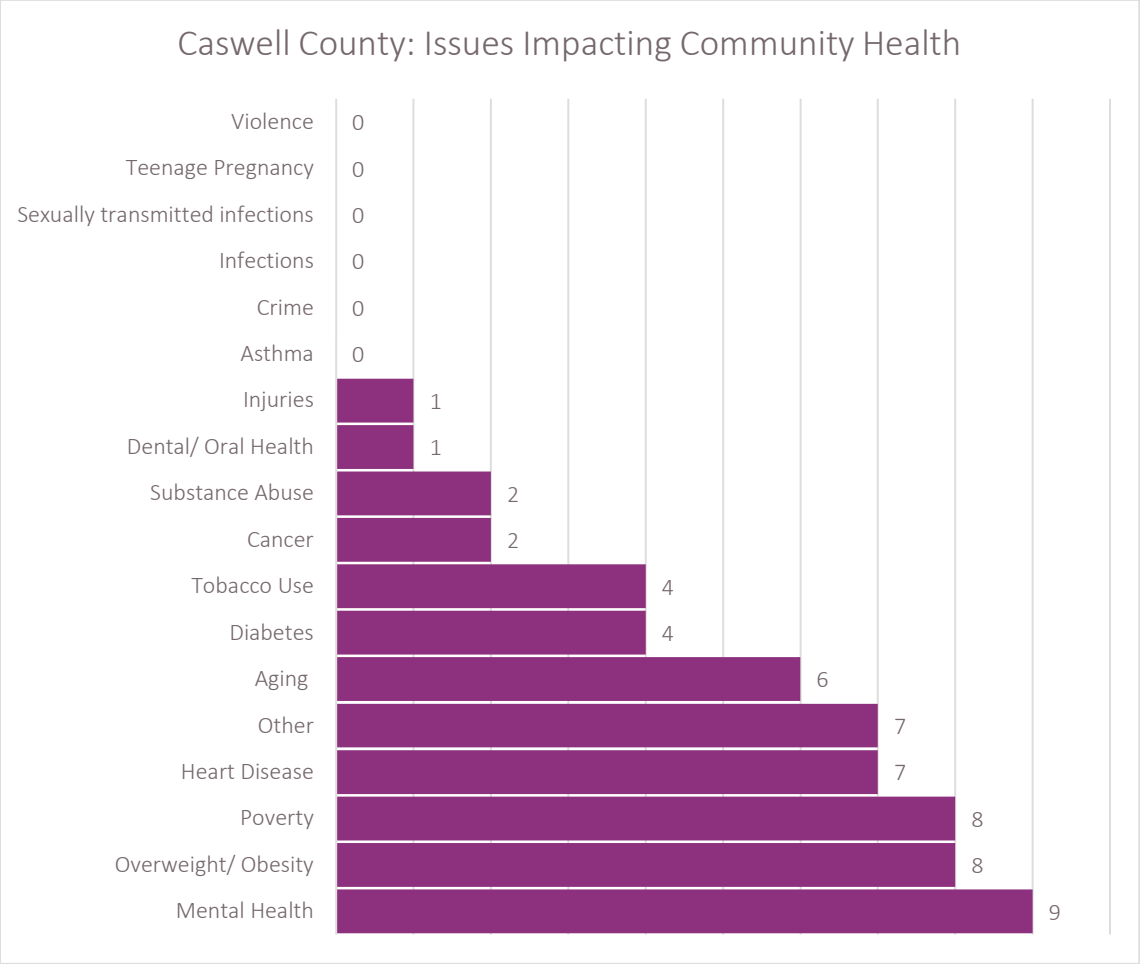
A chart with the full order of health issues including the number of votes received can be seen below. Furthermore, the full voting results for Caswell County, Danville and Pittsylvania County can also been seen throughout the next few pages. The top issues from each focus group became the discussion topics for the second half of the session.



The other category consists of seven votes for lack of economic development/ small business and one vote for transportation.

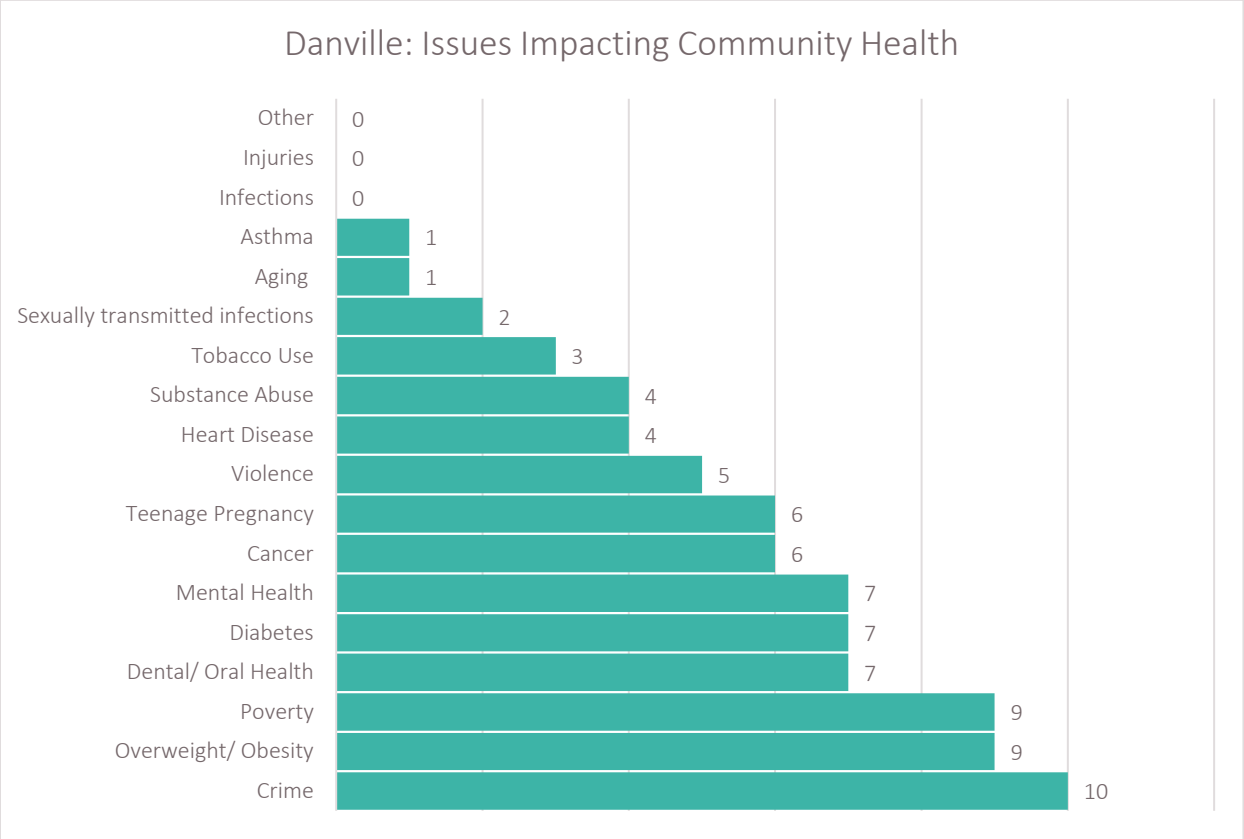
The top five issues impacting community health in Caswell County according to focus group participants are:

1. Mental Health
2. (tie) Overweight/ Obesity & Poverty
3. (tie) Heart Disease & Other (economic development/ small business)



The top six[30] issues impacting community health in the City of Danville according to focus group participants are:

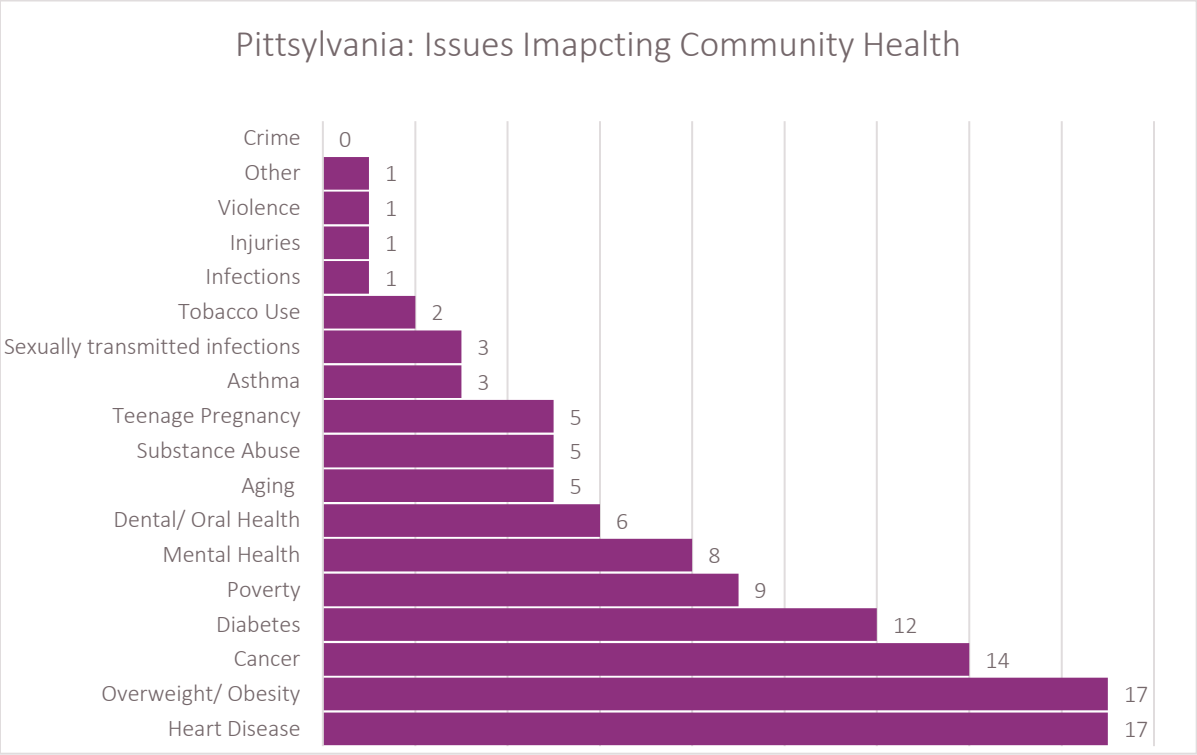
1. Crime
2. (Tie) Obesity/ Overweight & Poverty
3. (Tie) Poverty, Dental/ Oral Health, Mental Health



[30] Six were selected rather than five due to three issues being tied

The top five issues impacting community health in Pittsylvania County according the focus group participants are:

1. (Tie) Heart Disease & Obesity and Overweight
2. Cancer
3. Diabetes
4. Poverty



Discussion: Barriers and Challenges to Addressing Community Health

Aging

- Older community, risk for bad health is greater
- Aging parents moving back in with children who are strained. But doing the best that they can do.
- Lack of services for the aging population, especially for those dealing with Alzheimer's and dementia. Again, people doing the best that they can with what they have.
- Seniors do not want to ask for help. Feel that someone else needs the help more than they do.
- Seniors have trouble understanding the doctor and the directions that they give. Hard to do what the doctor says, especially if they still live alone.
- Lack of transportation keeps a lot of older folks inside and non-mobile.

Cancer

- Cost of going to the doctor
- Not having services nearby (in the counties)
- Complicated process (tests and screenings)
- Not knowing when to get tests and screenings done
- Transportation to the doctor is an issue. They might not feel good, but if they can't easily get to the doctor then they don't want to go. They put off things until it becomes too late.
- Getting checked for cancer is not something that you hear much about either
- Doctors should work on building trust and relationships with those that they see. It would go a long way in helping people not to be afraid of going to the doctor.
- Support system lacking in rural area
- The tests are expensive and sometimes the tests that they want you to get are not covered. Can't afford that.

Community Engagement

- Hard to reach and communicate with people in this big region. Especially with people living so far apart
- Cannot rely on one method of communication
- Limited internet access in the counties
- You must go to where the people are
- Churches and faith-based community
    - Can be hard to get to, but they provide a good link to the community
    - They are trusted

Crime

- Makes it hard for kids to go outside and play
- Don't feel safe walking in the neighborhood or going to the park with kids
- Crime creates fear and fear creates mistrust
- Can't be physically active in the community, if it is not safe to go outside or if we don't feel that it is safe (perception of crime/ fear of crime)

Diabetes

- Monitoring incorrectly or not enough. Don't know how to do it properly. Supplies can sometimes be hard to get. And Sometimes it comes down to money. It can be a this or that conversation.

- Trying to do what the doctor says, but still struggle with some of the tasks (Compliance and Health literacy)
- Eating for diabetes is hard, your choices are limited by where you live and how much money you have.
- Feel like this conversation is tied to the one we had on obesity. I think the same challenges that exist around healthy eating impact diabetes.

Healthy Eating

- Getting to fresh food - even the grocery store is not the best
- Distance is a challenge. It's expensive to eat healthy and then to add the cost of gas on top. It's too much.
- Lack of education and understanding about foods, nutrition and serving sizes
- How do you get more fresh foods out to some of the more rural areas?
- One grocery store for the entire county. Farmers' market is great, but it is not open all year
- Cost, it gets expensive and sometimes there is not that extra money to think about quality
- Sometimes it has to be quantity over quality
- Challenge for some in having enough food
- Teach people how to cook healthier with what they have access too.
- Lack of understanding and education about food and eating. What is healthy, what is not. How much should you consume?
- Not enough food grown in the community. People think that because there is a lot of agriculture that there is plenty of food. Not the case.
- Farmers need to be more visible and shift what they are growing to fee the county. Can't just be tobacco and soy beans.
- The location of fast food restaurants compared to the grocery store. It's easier, faster, and cheaper to go to the fast food place
- Transportation, if you don't have a car and can't find someone with a car to take you, well good luck.
- Farmers' market prices can still be expensive
- Sometimes have to make a decision over healthy food, medicine or rent.

Heart Disease

- Location of the doctor's offices out in the county.
- It is one of those things that is not really thought about until it's a problem
- Not knowing how different things you do impact your health
- Access to doctors and know about health and what to look out for (warning signs)
- Different medicines and what you can and cannot take with them, is confusing.
- Managing heart disease can be tough especially if you are looking for physical activity classes that you can do without causing more problems.

Mental Health

- Not enough doctors and services. This is true for both the city and the counties.
- If your insurance does not cover it, how do you pay?
- Where do you begin to look for help? Not clear where one would go for help

- Don't want to be known as a "crazy" person
- Time. Work a 12-hour shift, not exactly conducive to most doctor's office hours. Hours of services do not fit the community and its workers.
- Being labeled as someone who needs mental help is not a good thing.

Overweight/ Obesity

- An issue for sure. See it more today than when I was a kid.
- All the junk food does not help.
- Have to work with what we got and sometimes that is not the best
- Sometimes wonder, why those who are very overweight do not do more to improve their health, but then I look around and say with what. We don't have a gym, there is not a lot of health food, and there is not a lot of extra money floating around.

Physical Activity

- No gyms
- Not near a school or church with a playground, then there are no parks
- Some of the parks in the county are not it good shape. Discourages use
- They just did open parks at some of the schools, which is good, but this county is big and they are still far away.
- If your child is not into traditional sports, there is nothing for them to do.
- Location of opportunities. I live closer to town in another county, but they won't let my child play because we don't live in that county
- Cost, wish there were more free activities that were family friendly
- Programs seem to be what is "cool" at the moment, but that does not mean that the community is interested. They plan things without asking us and then get mad when we don't come.
- Parks, trails and activities can be hard to find if you are not from the area.
- Equipment at the park near by does not fit the age ranges of the kids any more
- The lack of regional public transportation makes it hard for those who live out in the more rural areas to be involved.
- Crime—makes many want to stay inside. We need leaders and adult supervision at the parks again.
- The trail along the river is nice, but it is hard to get to
- No place to play basketball
- Lack of play spaces in the county. Called a lot of churches to see if their equipment was open to the public, only a couple of the ones that I called said yes and some of them were not very welcoming
- We have parks and stores all over the place, but if no one can get to them, then what is the point?
- When the gym moved, it made it hard for me to go. I don't have a care and could walk to the old location, but the new location is too far away for me to that that.

Poverty/ Income and Economic Development

- Low income levels do not help
- Need small business
- Most seniors are living just off of social security – this makes it hard

- Low income does not support the cost of healthcare – many have to make tough choices if they have to buy medicine one month
- Poverty impacts everything from being able to afford good housing, food all of the time and extra activities for the kids and healthcare.
- I think those who have money, do not realize how much harder it makes it to not have money.

Transportation

- Hard to live without a car in the area.
- Sometimes the simple tasks can take all day if you are having to use public transportation
- Scheduling a doctor's appointment is hard when you also have the schedule it around bus routes and times.
- Public transportation does not go to where the jobs are. They also don't go to the nice big parks either.
- Transportation is a big thing. People assume that because these are buses that everything is good. But they don't go to where the jobs are.

Danville & Pittsylvania Community Health Survey

Part of the Dan River Region Community Health Needs Assessment

The Health Collaborative is a coalition of community minded organizations and individuals who are working to improve health throughout the Dan River Region. To help us better understand our community's challenges surrounding health and quality of life, we have begun a Community Health Needs Assessment process. As part of this process, we would appreciate your participation. Could you please fill out the survey below (it should take about 30 minutes to complete)? The information collected will be used to help identify current health trends, needs, challenges and opportunities for improving community health.

This survey is anonymous. Please **do not** place your name or any other identifying information on the survey. Your answers will not be connected to you in any way and surveys will be shredded at the end of the assessment process. You must be **18 years or older and live in Danville or Pittsylvania County** to participate, and please **only complete one (1) survey**. You can also take this survey online at http://bit.ly/danpitthealth.

1. Where do you live?
   - ☐ City of Danville, VA
   - ☐ Pittsylvania County, VA
   - ☐ I do not live in Danville or Pittsylvania County

2. Zip code where you live _____

3. Would you say **your health** is excellent, very good, good, fair, or poor?
   - ☐ Excellent
   - ☐ Very good
   - ☐ Good
   - ☐ Fair
   - ☐ Poor

4. Have you ever been told by a healthcare provider that you have/ had any of the following conditions or health risks (Check **ALL** that apply)?
   - ☐ Arthritis
   - ☐ Asthma
   - ☐ Cancer
   - ☐ COPD/ Emphysema
   - ☐ Depression or anxiety
   - ☐ Diabetes (during pregnancy only)
   - ☐ Diabetes (other than during pregnancy)
   - ☐ Heart disease
   - ☐ High blood pressure
   - ☐ High cholesterol
   - ☐ HIV/AIDS
   - ☐ Kidney disease
   - ☐ Mental illness
   - ☐ Osteoporosis
   - ☐ Overweight/ obesity
   - ☐ Sexually transmitted infections
   - ☐ Stroke
   - ☐ None

5. How many days in the past month were you **not** able to work or do daily activities because of poor **physical health**?
   - ☐ None (0)
   - ☐ 1 – 2 days
   - ☐ 3 – 4 days
   - ☐ 5 – 6 days
   - ☐ 7- 10 days
   - ☐ 11 or more days

6. How many days in the past month were you **not** able to work or do daily activities because of poor **mental health**?
   - ☐ None (0)
   - ☐ 1 – 2 days
   - ☐ 3 – 4 days
   - ☐ 5 – 6 days
   - ☐ 7- 10 days
   - ☐ 11 or more days
7. Choose the top **5 health issues** that have the greatest impact on you and your family (Make **only 5** checks).
   - ☐ Aging
   - ☐ Asthma
   - ☐ Cancer
   - ☐ Crime
   - ☐ Dental/ oral health problems
   - ☐ Diabetes
   - ☐ Heart disease/ heart attacks
   - ☐ Infections/ contagious diseases
   - ☐ Injuries
   - ☐ Mental health issues (depression, etc.)
   - ☐ Obesity/ overweight
   - ☐ Poverty
   - ☐ Sexually transmitted infections
   - ☐ Substance abuse (drugs, alcohol)
   - ☐ Teenage pregnancy
   - ☐ Tobacco use
   - ☐ Violence
   - ☐ Other (Please name) _____ _____
8. Have you seen a dentist in the last 12 months for routine care (Cleaning, X-rays, etc.)?
   - ☐ Yes
   - ☐ No
   - ☐ Don't know
9. How many days do you exercise for 30 minutes or more in a typical week?
   - ☐ None (0)
   - ☐ 1 -2 days
   - ☐ 3- 4 days
   - ☐ 5- 7 days
10. On average, how many servings of fruit do you eat each day?
   - ☐ None (0)
   - ☐ 1 – 2
   - ☐ 3 – 4
   - ☐ 5 or more
11. On average, how many servings of vegetables do you eat each day?
   - ☐ None (0)
   - ☐ 1 – 2
   - ☐ 3 – 4
   - ☐ 5 or more
12. On days when you drink alcohol, about how many drinks do you consume on average (1 drink = one can, glass, or shot)?
   - ☐ 1 drink
   - ☐ 2 -3 drinks
   - ☐ 4-5 drinks
   - ☐ 6 or more drinks
   - ☐ I do not drink alcohol

13. In the past 12 months have you used any of the following tobacco products (Check **ALL** that apply)?
    - ☐ Cigarettes
    - ☐ E-cigarettes
    - ☐ Smokeless tobacco (snuff/ dip/ chew/ snus)
    - ☐ Cigars/ pipes
    - ☐ I have not used tobacco in the past 12 months

14. Which of the following best describes your tobacco use?
    - ☐ Never
    - ☐ Daily
    - ☐ Occasionally
    - ☐ Past user/ quit

15. In the past 12 months have you used street or recreational drugs?
    - ☐ Yes
    - ☐ No

16. How often was the following statement true in the past 12 months? "The food I bought just didn't last, and I didn't have money to get more."
    - ☐ Often true
    - ☐ Sometimes true
    - ☐ Never true
    - ☐ Don't know

17. In the last 12 months were you ever hungry, but did not eat because there was not enough money for food?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

18. How do you pay for your healthcare (Check **ALL** that apply)?
    - ☐ Pay cash
    - ☐ Health insurance
    - ☐ Medicare
    - ☐ Medicaid
    - ☐ Veterans' Administration
    - ☐ Indian Health Service
    - ☐ Other (Please name) _____

19. Do you have a person(s) who you think of as your personal doctor or healthcare provider?
    - ☐ Yes, only one
    - ☐ Yes, more than one
    - ☐ No
    - ☐ Don't know

20. If you had to go to the hospital, which **one** would you select?
    - ☐ Alamance Regional Medical Center/ Cone Health
    - ☐ Annie Penn
    - ☐ Carilion Roanoke Memorial
    - ☐ Centra Gretna Medical Center
    - ☐ Danville Regional Medical Center
    - ☐ Duke
    - ☐ Lynchburg General
    - ☐ Martinsville Memorial
    - ☐ Morehead Memorial
    - ☐ Moses Cone (Greensboro)
    - ☐ Person Memorial
    - ☐ Sentara Halifax Regional
    - ☐ UNC Chapel Hill
    - ☐ University of Virginia
    - ☐ Veteran Affairs Hospital
    - ☐ Virginia Baptist Hospital
    - ☐ Wake Forest Baptist
    - ☐ Other (Please name) _____

21. Which of these issues have made it difficult for you to get the **health care** you need? (Check **ALL** that apply)
    - ☐ Afraid to have health check-up
    - ☐ Cost of care
    - ☐ Discrimination based on gender
    - ☐ Discrimination based on race
    - ☐ Discrimination based on sexuality
    - ☐ Other forms of discrimination
    - ☐ Do not know what type of services are available
    - ☐ Have no regular source of health care
    - ☐ Lack of evening and weekend services
    - ☐ Other (Please Name)
    - ☐ Insurance problems/ lack of coverage
    - ☐ Lack of transportation
    - ☐ Language problems/ could not communicate well with provider or office staff
    - ☐ Long waits for appointments
    - ☐ No available provider near me
    - ☐ Unfriendliness of provider or office staff
    - ☐ Not applicable
22. Which of these issues have made it difficult for you to get the **social services** you need? (Check **ALL** that apply)
    - ☐ Afraid to access social services
    - ☐ Cost of care
    - ☐ Discrimination based on gender
    - ☐ Discrimination based on race
    - ☐ Discrimination based on sexuality
    - ☐ Other forms of discrimination
    - ☐ Do not know what type of services are available
    - ☐ Have no regular source of care
    - ☐ Insurance problems/ lack of coverage
    - ☐ Lack of evening and weekend services
    - ☐ Lack of transportation
    - ☐ Language problems/ could not communicate well with provider or office staff
    - ☐ Long waits for appointments
    - ☐ No available provider near me
    - ☐ Unfriendliness of provider or office staff
    - ☐ Not applicable
    - ☐ Other (Please name) _____
23. Which medical specialties are **most needed** in Danville or Pittsylvania County (Choose **ALL** that apply)?
    - ☐ Allergy care
    - ☐ Cancer/ Oncology
    - ☐ Cardiology
    - ☐ Chiropractor
    - ☐ Dentist
    - ☐ Dermatology
    - ☐ Ear, Nose &Throat (ENT)
    - ☐ Emergency room
    - ☐ Endocrinology
    - ☐ Eye doctor
    - ☐ General/ primary care
    - ☐ Geriatric
    - ☐ Hospital
    - ☐ Internal medicine
    - ☐ Mental health
    - ☐ Ob/ GYN
    - ☐ Orthopedic
    - ☐ Pediatrics
    - ☐ Pulmonary
    - ☐ Radiology/ Imaging
    - ☐ Rheumatology
    - ☐ Urgent care
    - ☐ Urology
    - ☐ Other (Please name) _____

24. Do you receive Temporary Assistance for Needy Families (TANF) benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

25. Do you receive Women Infants and Children (WIC) benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

26. Do you receive Supplemental Nutrition Assistance Program (SNAP) benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

27. Do you receive Social Security benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

28. Do you receive Senior Farmers' Market Nutrition Program (SFMNP) benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

29. Do you receive Railroad retirement benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

30. Do you receive a private pension?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

31. Do you receive Supplemental Security Income (SSI)?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

32. Do you receive Disability benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

33. Do you receive Veterans benefits?
    - ☐ Yes
    - ☐ No
    - ☐ Don't know

34. Do you receive other forms of retirement income?
    - ☐ Yes (Please name) _____
    - ☐ No
    - ☐ Don't know

35. Do you receive other forms of public assistance?
    - ☐ Yes (Please name) _____
    - ☐ No
    - ☐ Don't know

For each of the following statements, tell us if it makes it <u>easier or harder for you</u> to make healthy choices (for example, easier or harder to eat healthy food, be physically active, seek out health care).

36. The location of food outlets (grocery stores, corner stores, convenient stores, community gardens and farmers' markets) makes it _____ to make healthy choices
    - ☐ Easier
    - ☐ Harder
    - ☐ Don't know
37. The location of fast food restaurants makes it _____ to make healthy choices
    - ☐ Easier
    - ☐ Harder
    - ☐ Don't know

38. The location of parks, playgrounds open spaces, gyms and recreational facilities makes it_____ to make healthy choices
    - ☐ Easier
    - ☐ Harder
    - ☐ Don't know

39. The location of heath care services makes it_____ to make healthy choices
    - ☐ Easier
    - ☐ Harder
    - ☐ Don't know

40. The location of mental health services makes it _____ to make healthy choices
    - ☐ Easier
    - ☐ Harder
    - ☐ Don't know

41. The current level of safety in your neighborhood makes it _____ to make healthy choices
    - ☐ Easier
    - ☐ Harder
    - ☐ Don't know

42. Your current level of access to public transportation makes it _____ to make healthy choices
    - ☐ Easier
    - ☐ Harder
    - ☐ Don't know

43. The affordability of housing in your community makes it _____ to make healthy choices
    - ☐ Easier
    - ☐ Harder
    - ☐ Don't know

For the next set of questions, think about the **accessibility** (availability, cost, ability to get there, etc.) of different health and social services in your community. How satisfied or unsatisfied are you with your level access to the following services:

44. How do you feel about the **accessibility** of health care or medical services in the area?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

45. How do you feel about the **accessibility** of mental health services in the area?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

46. How do you feel about the **accessibility** of health care or medical services for seniors (65+)?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

47. How do you feel about the **accessibility** of mental health services for seniors (65+)?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

48. How do you feel about the **accessibility** of alcohol or drug treatment services for adults?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

49. How do you feel about the **accessibility** of alcohol or drug treatment services for youth?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

50. How do you feel about the **accessibility** of dental services in the area for adults?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

51. How do you feel about the **accessibility** of dental services in the area for youth?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

52. How do you feel about the **accessibility** of programs and services to help people quit smoking or other tobacco use?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

53. How do you feel about the **accessibility** of health care or medical providers who take your insurance?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

54. How do you feel about the **accessibility** of medical specialists in the area?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

55. How do you feel about the **accessibility** of living wage jobs in your community?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

56. How do you feel about the **accessibility** of educational opportunities in your community?
    - ☐ Not satisfied
    - ☐ Somewhat satisfied
    - ☐ Very satisfied
    - ☐ Don't know

57. How would you rate the overall health in your community?
    - ☐ Excellent
    - ☐ Very good
    - ☐ Good
    - ☐ Fair
    - ☐ Poor

58. What are the **top 5 health issues** that have the greatest impact on **the community** as a whole (make **5 checks** only)?
    - ☐ Aging
    - ☐ Asthma
    - ☐ Cancer
    - ☐ Crime
    - ☐ Dental/ oral health problems
    - ☐ Diabetes
    - ☐ Heart disease/ heart attacks
    - ☐ Infections/ contagious diseases
    - ☐ Injuries
    - ☐ Mental health issues (depression, etc.)
    - ☐ Obesity/ overweight
    - ☐ Poverty
    - ☐ Sexually transmitted infections
    - ☐ Substance abuse (drugs, alcohol)
    - ☐ Teenage pregnancy
    - ☐ Tobacco use
    - ☐ Violence
    - ☐ Other (Please name)

      _____

59. Other than from your doctor, how would you **prefer** to receive health and wellness information?
    - ☐ Radio
    - ☐ Newspaper
    - ☐ TV
    - ☐ Social media
    - ☐ Online (websites)
    - ☐ Emails
    - ☐ Newsletters (electronic)
    - ☐ Word of mouth
    - ☐ Community events
    - ☐ Other (Please name)

      _____

60. What is your age?
    - ☐ 18 to 24 years
    - ☐ 25 to 34 years
    - ☐ 35 to 44 years
    - ☐ 45 to 54 years
    - ☐ 55 to 64 years
    - ☐ 65 to 74 years
    - ☐ 75 years and over

61. How would you classify your race?
    - ☐ White
    - ☐ Black or African American
    - ☐ American Indian or Alaska Native
    - ☐ Asian
    - ☐ Native Hawaiian or other Pacific Islander
    - ☐ Two or more races (Please name)

      _____

62. Are you of Spanish, Hispanic or Latino origin?
    - ☐ No
    - ☐ Yes

63. How would you classify your ethnicity (examples: Akan, Chicano, Samoan, Laotian, Cherokee/ other enrolled or principle tribe)? Please name below

_____

64. What is your gender?
    - ☐ Male
    - ☐ Female
    - ☐ Other (Please name)

      _____

65. What was your household income (the combined income of everyone in your household) last year?
    - ☐ Less than $20,000
    - ☐ $20,000 - $29,999
    - ☐ $30,000 - $39,999
    - ☐ $40,000 - $49,999
    - ☐ $50,000 - $59,999
    - ☐ $60,000 - $69,999
    - ☐ $70,000 - $79,999
    - ☐ $80,000 - $89,999
    - ☐ $90,000 - $99,999
    - ☐ $100,000 -$149,999
    - ☐ $150,000 or more

66. What is your highest level of education?
    - ☐ Elementary or middle school
    - ☐ Some high school
    - ☐ High school graduate or GED
    - ☐ Associate degree
    - ☐ Technical or vocational degree or certificate
    - ☐ Some college
    - ☐ College graduate
    - ☐ Graduate or professional degree

67. What is your employment status?
    - ☐ Employed full-time
    - ☐ Employed part-time
    - ☐ Self- employed
    - ☐ Out of work for 1 year or more
    - ☐ Out of work for less than 1 year
    - ☐ A stay at home mom or dad
    - ☐ A student
    - ☐ Retired
    - ☐ Other

68. Do you currently rent or own your home (apartment, house, mobile home, etc.)?
    - ☐ Rent
    - ☐ Own
    - ☐ No

69. How many people live in your household, or where you stay most of the time (including yourself)
    - ☐ 1
    - ☐ 2
    - ☐ 3
    - ☐ 4
    - ☐ 5
    - ☐ 6
    - ☐ 7 or more

70. Of those who live in your household, or where you stay most of the time, how many are 0 (Newborn) to 10 years old?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

71. Of those who live in your household, or where you stay most of the time, how many are 11 to 17 years old?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

72. Of those who live in your household, or where you stay most of the time (including yourself), how many are 18 to 44 years old?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

73. Of those who live in your household, or where you stay most of the time (including yourself), how many are 45 years old or older?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

Key Informant Interview: Guide

Interviewer's Initials: _____

Date: _____ Start Time: _____ End Time: _____

Name of Interviewee: _____Title: _____

Organization: _____ Service Area: _____

No. serving in / Pittsylvania /Danville / Caswell:

_____

Introduction: This Community Health Needs Assessment and Health Equity Report process is a project of The Health Collaborative. The Health Collaborative, a coalition of community-minded organizations is gathering local data as part of a developing a plan to improve health outcomes and increase health equity throughout the Dan River Region. Community engagement is essential to this process. Surveys, focus groups and key informant interviews are being used to engage community members.

You have been selected for a key informant interview because of your knowledge, insight and familiarity with the community. The themes that emerge from these interviews will be combined and summarized. Only the summarized results will be made available to the public. Individual interviews will be kept confidential.

I'll be asking you a series of questions about health focused on access and health equity in the Dan River Region. As you consider the following questions, please think of health defined broadly to include a state of physical, mental and social well-being and not just the absence of disease or disability. Also, please share your local perspective based on your current position(s) and experiences in the community you serve. When I refer to your community in the questions, I am referring to the communities you serve.

(I will be putting you on speaker phone. You will hear me typing notes as you respond.)

Do you have any questions before I begin with my first question?

Agency/ Organization

1. Can you tell me about your organization?
    a. Mission
    b. What communities you work in
    c. Who are the main clients/ audiences for your programs/ services?
2. What are some of the biggest challenges your organization faces in providing these programs/ services?
    a. Do you currently partner with any other organizations or institutions in any of your programs/ services?

Quality of Life

1. In general, how would you describe the status of health and quality of life in your community?

2. In your opinion, has health and quality of life in your community improved, stayed the same or declined over the past few years?
    a. Why?
    b. What other factors have contributed to the improvement/ decline or health/ quality of life

Community Issues

1. How would you describe the community which your organization serves?
    a. What do you consider to be the community's strongest assets/ strengths?
    b. What are some of its biggest general concerns?
        i. What challenges do residents face day-to-day? **(Probing Question)**
2. What does the term healthy community mean to you?
3. What factors affect health in your community?
4. What do you think are the most pressing **health** concerns in your community?
    a. Why?
        i. How have these issues affected your community?
        ii. Which populations in the community do you think are most vulnerable or at risk for these conditions?
        iii. From your experience, what are residents' biggest challenges to addressing these health issues? [e.g., Various barriers to accessing medical / preventative care and services, socio-economic factors, lack of community resources, social/ community norms etc.]

Perceptions of public health/ prevention services and healthcare

1. What programs/ services are you aware of in the community that currently focus on these health issues?
    a. In your opinion, how effective have these programs/ services been at addressing these issues and why?
    b. Where are the gaps? What programs or services are currently not available that you think should be?
    c. What do you think needs to be done to address these health issues?
        i. Are you aware of current opportunities that can be seized upon to address these issues?
2. In general, what do you see as the overall strengths and limitations related to the public health/ prevention- related services in your community?
    a. What challenges do residents in your community face in accessing prevention services or programs?
        i. What programs services and practice need to happen in your community to help residents overcome or address these challenges?

Vision of Community and program/ service environment

1. When you think about the community 3-5 years from now, what would you like to see? What is your vision for the future?
    a. What is your vision specifically related to people's health in the community?
        i. What do you think needs to happen in the community to make this vision a reality?
2. How would you define effective community engagement?
3. How can we keep the community engaged in this process in a meaningful way?

Focus Group Facilitator Guide

Hello and welcome to our discussion group today. Thank you for taking the time to participate. The purpose of this discussion is to get your input on health issues that matter most to you, as well as your thoughts and perceptions about the health of your community. This is part of a Community Health Assessment effort by The Health Collaborative.

The Health Collaborative is a cross-sector coalition of community-minded organizations working towards improving the health outcomes of the Dan River Region through a shared vision of wellness. Through its work, The Health Collaborative aims to create a Dan River Region whose health indicators reflects a healthy, active, engaged region where everyone lives in an environment in which they can thrive.

In order to facilitate Health for All, the Collaborative is working in four main areas

- Active Living
- Health Eating
- Access to Healthcare
- Healthy Spaces

Discussion Guidelines

1. I will ask general questions, and ask for your opinions and ideas. Please remember that there are no right or wrong answers. Everything you tell is valuable. I know you will have a lot of information and experiences to offer, so on occasion, I may have to change the direction of the discussion so we can cover everything in the time we have together.

2. Feel free to respond to something someone else says and feel free to disagree, but please show respect for others even if you disagree with their opinions. Again, there are no wrong answers. At certain points in our discussion, I may poll the group to determine how many of you agree or disagree about a certain issue. This will be done to summarize opinions.

3. I want to emphasize that the discussion today will remain absolutely confidential. It's possible that some people will share personal stories or opinions. We ask all of you to refrain from sharing information from our discussion with others outside of the group. Any reports that come out of the discussion will focus on themes and ideas. Your name will not be shared or linked with anything that you say in today's focus group.

4. Today's session will go from (Time of Session) and we will be sure to end on time. You should also feel free to get up and stretch, go to the bathroom, or help yourself to refreshments.

Are there any questions before we begin?

Focus Group Structure

Timing 2 hours

I. Structured general questions about community health
II. Voting activity (top 5 issues which impact community health the most)
    a. Conversation about the barriers to addressing those issues

Structured Conversation-- General questions

1. What does being healthy mean to you?
2. What do you think when you hear "Community Health"?
3. What does being physically active mean to you?
4. What does eating healthy mean to you?

Activity

Instructions: Each participant will get 5 dots to vote on the question below (taken directly from the Community Health Survey)

2. What are the top 5 health issues that have the greatest impact on the community as a whole (make 5 checks only)?
   - ☐ Aging
   - ☐ Asthma
   - ☐ Cancer
   - ☐ Crime
   - ☐ Dental/ oral health problems
   - ☐ Diabetes
   - ☐ Heart disease/ heart attacks
   - ☐ Infections/ contagious diseases
   - ☐ Injuries
   - ☐ Mental health issues (depression, etc.)
   - ☐ Obesity/ overweight
   - ☐ Poverty
   - ☐ Sexually transmitted infections
   - ☐ Substance abuse (drugs, alcohol)
   - ☐ Teenage pregnancy
   - ☐ Tobacco use
   - ☐ Violence
   - ☐ Other (Please Name)

Conversation around the issues selected

Instructions: Take the top 3 to 5 (depending on the time remaining) and discuss the barriers and challenges to discussing these barriers. Have the participants define/frame the issue and discuss barriers to addressing these aspects of community health.

Example: Obesity/ Overweight

1. What do the words overweight and obesity mean to you?
   a. In your opinion is weight related to health? How?
2. What are the challenges you and your community face in being physically active?
3. Do you feel there are opportunities in your community for children and adults to be active?
   a. Do the current locations, quality of parks, playgrounds and open space make it easier or harder for you and your community to be physically active? Why?
4. What helps people to eat healthy?
5. What makes eating healthy challenging?

[i] Virginia Department of Health. 2017. *Chronic Disease Prevalence by Health District*. Retrieved from Chronic Disease Data: http://www.vdh.virginia.gov.data/chronic-disease/ Accessed 04 April 2017.

[ii] Centers for Disease Control and Prevention. 16 May 2016. *Diabetes Home: County Data Indictors*. Retrieved from: Obesity Prevalence: https://www.cdc.gov/diabetes/data/countydata/countydataindicators.html Accessed 15 January 2017.

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