

# Nantucket

Community Health Assessment

# 2017 CHA



Nantucket Health Department



**Public Health**  
Prevent. Promote. Protect.

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# Table of Contents

Executive Summary.....	8
Methods.....	8
Results.....	8
Introduction.....	10
MAPP Process.....	10
Limitations.....	14
Understanding the Social Determinants of Health and Health Equity.....	14
Social Determinants of Health.....	14
Health Equity.....	15
Findings.....	16
Demographics.....	16
Socio-demographics.....	16
Age.....	17
Race and Ethnicity.....	17
Primary Languages Spoken.....	18
Citizenship.....	18
Education.....	19
Income.....	20
Poverty.....	20
Public Assistance.....	21
Unemployment.....	21
Social and Physical Environment.....	22
Water Quality.....	22
Housing.....	22
Transportation.....	22

Crime and Safety.....	23
Alcohol and Drug Use.....	24
Health Indicators.....	27
Overall Health.....	27
Mortality.....	27
Infant Mortality.....	28
Mental Health.....	28
Suicide.....	28
Chronic Disease.....	29
Cancer.....	29
Diabetes.....	30
Infectious Disease.....	32
HIV/AIDS.....	32
STDs.....	32
Other Communicable Diseases .....	33
Tick-Borne Illnesses.....	33
Health Equity.....	33
Access to Care.....	33
Cultural Competency.....	34
Priorities.....	36
Priority 1: Mental Health.....	36
Why is this Important? .....	36
Nantucket’s Current Status.....	36
Available Resources.....	37
Priority 2: Substance Use/Abuse.....	37
Why is this Important? .....	37

Nantucket’s Current Status.....	37
Available Resources.....	40
Priority 3: Lack of Affordable Housing.....	40
Why is this Important? .....	40
Nantucket’s Current Status.....	40
Available Resources.....	40
Priority 4: Access to Health Care.....	40
Why is this Important? .....	41
Nantucket’s Current Status.....	41
Available Resources.....	42
Priority 5: Tick-borne Illnesses.....	42
Why is this Important? .....	42
Nantucket’s Current Status.....	42
Available Resources.....	43
Priority 6: Cancer.....	43
Why is this Important? .....	43
Nantucket’s Current Status.....	43
Available Resources.....	45
Implementation Strategy/Action Plans.....	46
Appendix.....	47
Acronyms.....	47
Vocabulary.....	47
Survey Results.....	48
Survey Questions.....	60



## Executive Summary

Bettering the health of the population is necessary for increasing residents' quality of life as well as improving the overall success of a community. Community health is a result of numerous factors such as housing, transportation, education, environment, employment, and many more. Understanding these factors and how they affect public health on Nantucket is vital to community health improvement.

The Nantucket Health Department, along with various community partners, led a Community Health Assessment (CHA) to improve the health of Nantucket. The CHA was conducted with the help of Nantucket Cottage Hospital, Fairwinds Counseling Center, A Safe Place, Nantucket Fire Department, Nantucket Police Department, Nantucket Public Schools, and The Community Action Committee of Cape Cod and Islands. All of these community partners played important roles in the CHA process by providing the Nantucket Health Department with data reflecting each of their specific services.

The 2017 Nantucket Community Health Assessment (CHA) intends to provide a comprehensive portrayal of Nantucket's most current health status as well as its' assets and needs with regards to health.

## Methods

The Health Department decided to utilize the Mobilizing for Action through Planning and Partnerships (MAPP) framework as a guide for the assessment process. MAPP was developed by the National Association of County and City Health Officials (NACCHO) with support from the Centers for Disease Control (CDC). The MAPP framework includes six phases: 1) Organizing for Success, 2) Visioning, 3) Four MAPP Assessments, 4) Identifying Strategic Issues, 5) Formulating Goals and Strategies, and 6) Action. The Assessment process includes phases 1-4 while the Improvement Planning process includes phases 4-6. Both Primary and Secondary data was used in this assessment. A source of primary data includes the Community Health Assessment (CHA) Survey. Secondary data was collected from Nantucket Cottage Hospital, Fairwinds Counseling Center, A Safe Place, Nantucket Fire Department, Nantucket Police Department, Nantucket Public Schools, and the Community Action Committee of Cape Cod and Islands.

## Results

The CHA Survey results have identified the following six community factors as indicators of a healthy community. They are ranked from highest to lowest:

1. Low Crime/ Safe Neighborhoods
2. Access to Health Care

3. Access to Healthy Foods
4. Good Jobs and Healthy Economy
5. Affordable Housing
6. Access to Mental Health Care

The following public health issues have been identified as Nantucket's priorities by the key stakeholder's group (identified on page 12). These priorities were identified as areas Nantucket needs to specifically improve on in order to make the most significant difference in the health of the community. The priorities are not ranked.

Mental Health

Substance Use/Abuse

Lack of Affordable Housing

Access to Health Care

Tick-Bourne Illnesses

Cancers

## Introduction

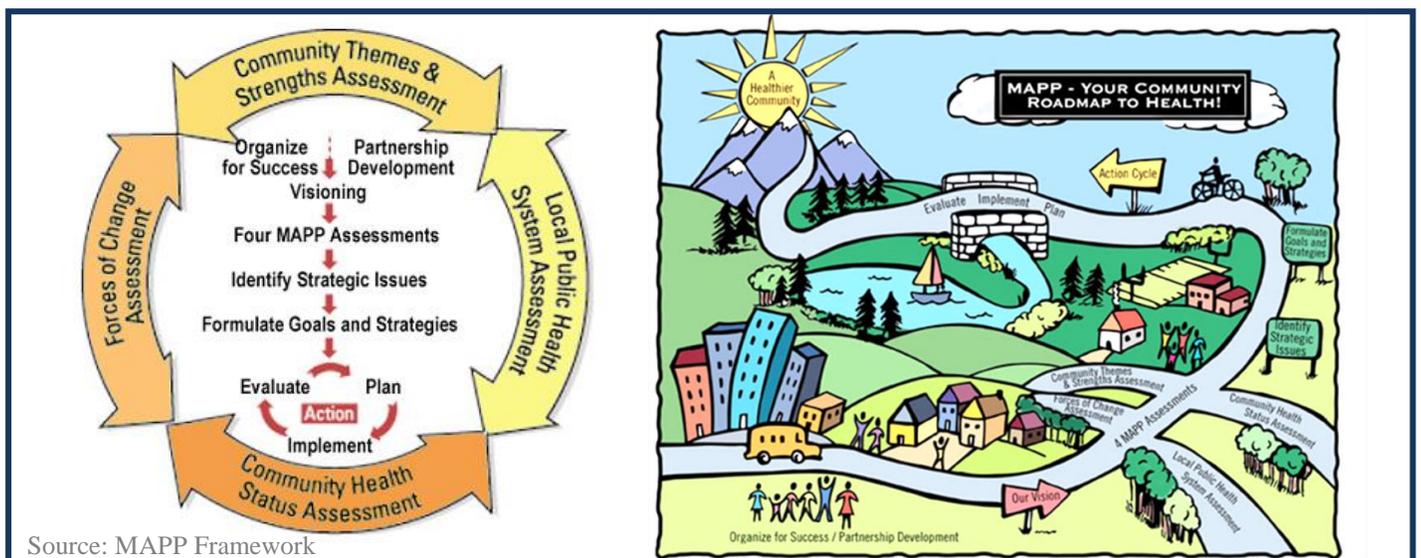
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## MAPP Process

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## **Phase 1: Organizing for Success**

The Nantucket Health Department conducted a Community Health Assessment with the help of the following community centers:

A Safe Place

Community Action Committee of Cape Cod and Islands

Fairwinds Counseling Center

Nantucket Cottage Hospital

Nantucket Fire Department

Nantucket Police Department

Nantucket Public Schools

The community centers listed above contributed to the Community Health Assessment process by providing the Nantucket Health Department with data regarding the health of the community. Nantucket's CHA process began in June of 2017.

## **Phase 2: Visioning**

### *Vision*

The Nantucket Health Department's vision is to serve Nantucketers as a nationally accredited, 21<sup>st</sup> century health department, capable of improving population health through data-driven decision making and policy development.

## **Phase 3: Four MAPP Assessments**

### *1. Community Health Status Assessment*

The Community Health Status Assessment (CHSA) collects quantitative data on key health indicators such as disease prevalence and behavioral risk factors. The CHSA was completed by collecting and analyzing secondary data related to primary, secondary, and tertiary determinants of health. Primary determinants of health include social, physical and economic environments, secondary determinants include behaviors and lifestyle, and tertiary determinants are health conditions.

### *Secondary Data Collection*

Community Demographics including social, economic, and housing data was collected to better understand the population of Nantucket. Secondary data sources include the US Bureau of Census, town, state, and national databases.

Health and healthcare data was obtained through the ASAP Pride survey, MASSCHIP, American Cancer Society, and US Census American Factfinder.

### ASAP Pride Survey

Nantucket High School participates in the ASAP Pride survey every three years. The 2017 survey was taken by 361 students. The survey questions assess the risky behaviors of students and provide information about alcohol and other drug use, as well as school safety.

### *2. Community Themes and Strengths Assessment*

The Community Themes and Strengths Assessment (CTSA) is intended to seek input from the community on the quality of life perceptions, priorities for action, and available assets that could be mobilized to improve health. Data for this assessment was collected through the 2017 Community Health Assessment Survey.

### 2017 Community Health Assessment Survey

A CHA Survey was conducted in 2017 in order to assess the community's needs and strengths with regards to healthy living. The survey was posted to the town website as well as various social media pages with the goal of reaching as many community members as possible.

The Community Health Assessment Survey was developed by the Health Department. It was offered in three different languages: English, Spanish, and Portuguese. The survey was created using Google Forms and was anonymous.

The survey included 27 questions ranging from personal health to community health priorities. The results of the survey as well as a copy of the English version are included at the end of the CHA report. As of 8/9/17, 39 survey responses have been recorded.

### *3. Local Public Health System Assessment*

The Local Public Health System Assessment (LPHSA) is intended to assess the strengths and weaknesses of the local public health system and the capacity to respond to health needs. The local public health system is defined as the local network of agencies, organizations, and stakeholders that work to positively influence the health of the community. This definition includes organizations beyond the local health department such as clinical providers, schools, public safety, social service organizations, community organizations, faith groups, etc.

### 2017 Community Health Assessment Survey

The CHA Survey mentioned above was also useful in gathering information about the effectiveness of the local public health system. Questions about the satisfaction of certain health services on island were included in the survey.

### *4. Forces of Change Assessment*

The Forces of Change Assessment (FoC) is intended to identify the broad trends, factors, and events that may influence local public health both positively and negatively. The FoC was completed by the CHA Survey.

## Phase 4: Identifying Strategic Issues

### *Prioritization*

A group of six key stakeholders was chosen to identify Nantucket's goals and priorities. The group held a strategic planning meeting on August 15, 2017. This group included:

Roberto Santamaria, Director, Nantucket Health Department

Tessandra De Alberdi, Executive Director, Fairwinds

Jason Graziadei, Public Information Officer, Nantucket Cottage Hospital

Cormac Collier, Executive Director, Nantucket Land Council

Jeff Carlson, Natural Resources Coordinator, Nantucket Natural Resources Department

Amelia Murphy, Intern, Nantucket Health Department

The first step in this phase is to prioritize areas for developing CHIP strategies. A number of priorities were identified by the community using the CHA survey. The Nantucket Health Department then rated each of the preliminary priorities on each of the following questions:

What is the magnitude of the health concern?

- Affects the whole community
- Affects most of the community
- Affects some of the community
- Affects a few members of the community

Given limited resources, how important is it to address the health concern?

- It is critically important
- It is very important
- It is somewhat important
- It is not very important
- It would be nice to address, but isn't immediately important

To what degree do we have the ability to affect the health concern?

- If we take action, the concern will be solved
- If we take action, health will significantly improve

- If we take action, health will improve noticeably
- If we take action, health will slightly improve
- If we take action, health will not improve

The Health Department identified six priorities, which are discussed at length in the Priorities section of this report, using this process. The priorities are:

Mental Health

Substance Use/Abuse

Lack of Affordable Housing

Access to Health Care

Tick-Bourne Illnesses

Cancers

## Limitations

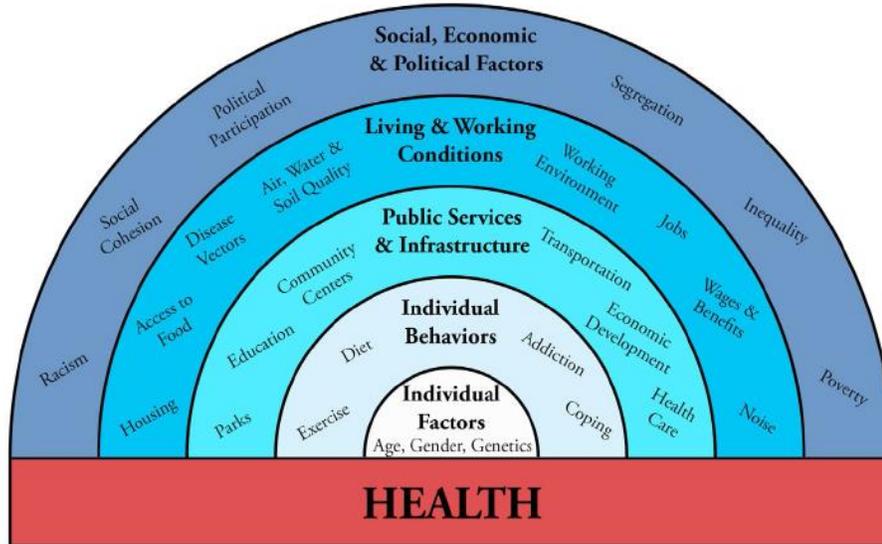
With any assessment that involves the use of community response, there can be limitations or errors in the data. One limitation that was faced with the CHA Survey was the lack of diversity in responses. With any community surveying, populations can be missed or underrepresented. 79.5% of the responses were from females, and 97.4% of the respondents identified as white. Males and non-white populations were underrepresented. Although the survey was available in Spanish and Portuguese, all of the responses were collected from the English survey. Non-English speakers were underrepresented. Our surveys were completely online. We used Facebook, Twitter, Instagram, and the Health Department website to inform the public about the surveys. The population of islanders without social media accounts or internet access was therefore underrepresented.

## Understanding the Social Determinants of Health and Health Equity:

### Social Determinants of Health

According to the World Health Organization, “social determinants are the conditions, under which people are born, grow, live, and age. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels.” Some examples of determinants are a person’s genetics, education, place of work, and social factors like racism. A

more complete representation of the different determinants of health can be found in the following figure.



Source: Central MA CHA

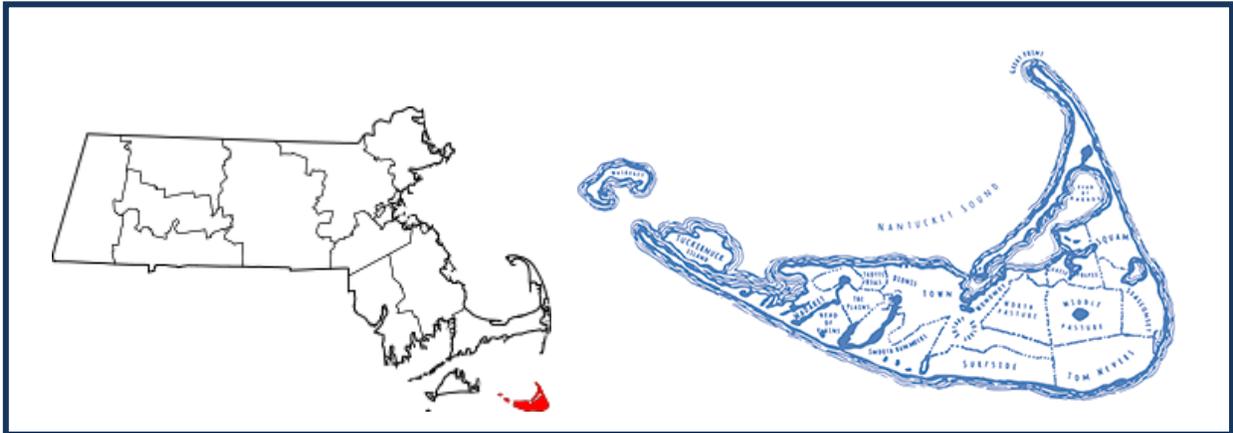
## Health Equity

Health equity is achieved when all people, regardless of social position or other socially-determined circumstances, have an equal opportunity to be healthy. The Centers for Disease Control & Prevention (CDC) states that health equity occurs when “every person has the opportunity to attain his or her full health potential and no one is disadvantaged from achieving this potential because of social position or other socially-determined circumstances. Health inequalities are reflected in differences in length of life; quality of life; rate of disease, disability, and death; severity of disease, and access to treatment.” All around the world, people experience barriers to accessing health care because of language, transportation, poverty, and racism among other reasons. Health equity is something that Nantucket is always striving to achieve.

# Demographics

## Socio-demographics

Nantucket sits about 30 miles off the coast of Cape Cod in Massachusetts. It is the only town in Massachusetts that is also its own county. Nantucket is 105.25 square miles, and is home to about 11,000 year-round residents. The population of Nantucket fluctuates in the summer months due to its reputation as a tourist destination and the many residents who own summer homes.



Source: Google Images

Based on the 2010 census, Nantucket has a population of 10,556 people of varying resident composition. Nantucket makes up less than one percent of Massachusetts’ total population of about 6,547,629 people.

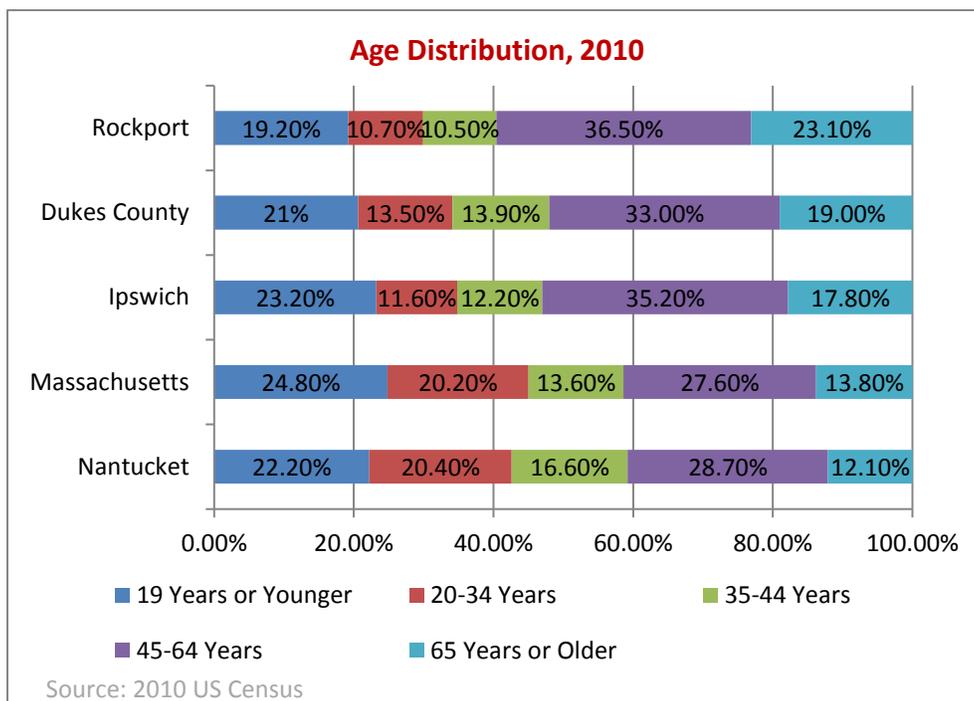
To thoroughly assess the health of Nantucket, three similar sized towns and counties have been chosen in addition to the state of Massachusetts to be used as comparisons. The chosen towns/counties are Dukes County, which includes Martha’s Vineyard and islands off of Falmouth; Ipswich, MA; and Rockport, MA. Dukes County is most comparable to Nantucket since it is also an island, and in theory provides a similar environment. Ipswich and Rockport are both small towns in Essex County, Massachusetts. Ipswich has a population of 13,616 and Rockport has a population of 7,111, both according to the 2010 Census.

	Nantucket	Massachusetts	Ipswich	Dukes County	Rockport
<b>Population</b>	10,556	6,547,629	13,616	17,048	7,111

Source: 2010 Census

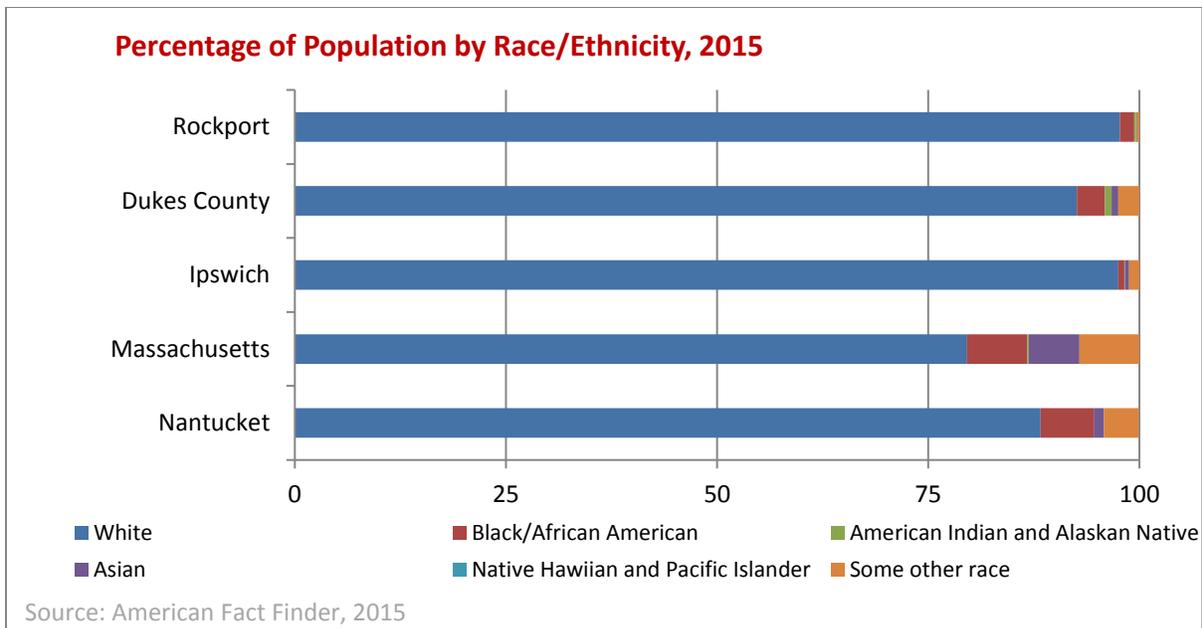
## Age

The graph below indicates the age distribution of Nantucket and the state of Massachusetts, as well as three similar sized towns and counties. According to the 2010 census, the largest age representation on Nantucket is ages 45-65. The median age of Nantucket is 39.5 compared to 39.3 for Massachusetts. Approximately a quarter of the population is under 20 (22.20%). The age distribution on Nantucket is similar to the age distribution of Massachusetts. Ipswich, Rockport, and Dukes County all have older populations. Their median ages are: 48 (Ipswich), 45.9 (Dukes County), and 53 (Rockport).



## Race and Ethnicity

Following Massachusetts, Nantucket is the most diverse out of the comparable towns/counties. The following graph shows that Nantucket has a large white population (88.3%). The second most-represented race is Black/African American (6.3%) followed by 1.2% Asian, and the rest being other (4.1%). Although Nantucket is the most diverse of the comparable towns, it is not very diverse. The graph clearly shows the majority of the population being white. Massachusetts as a whole is 79.6% white, which is less than Nantucket, but also not very diverse.

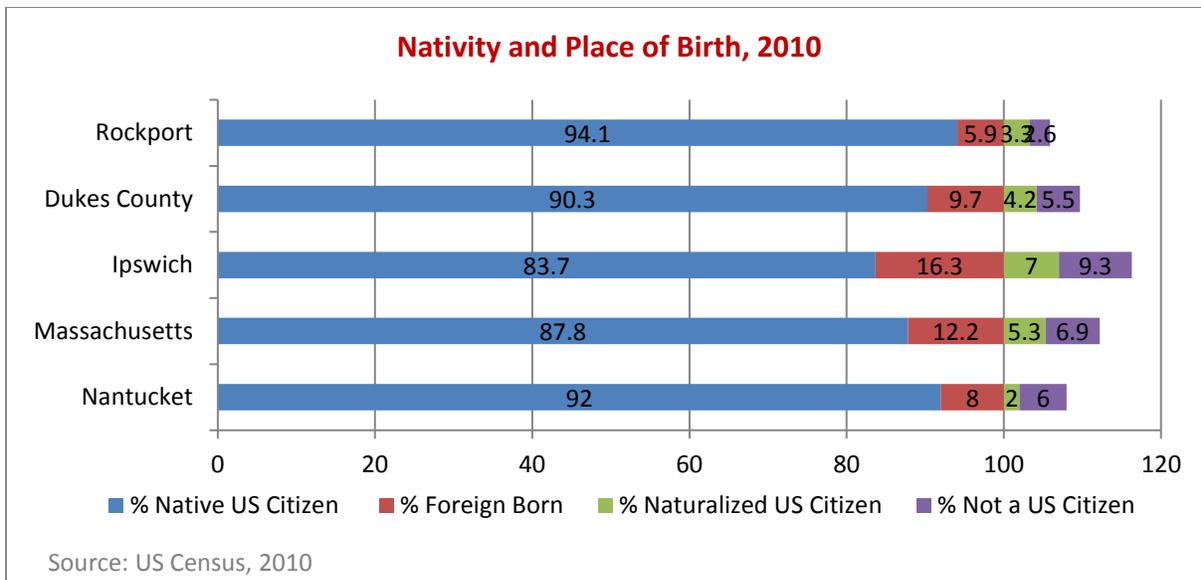


## Primary Languages Spoken

English is the primary language spoken in all of the municipalities, including the state of Massachusetts. All the municipalities have a higher percentage of English speakers than the state. Nantucket is made up of 71.5% English only and 28.5% other based on the public school population. 2.3% of students speak Portuguese at home, 22.7% of students speak Spanish at home, and the other 3.5% of students speak other various languages at home such as Bulgarian, Russian, and Nepali. At a state level, 8.4% speak Spanish at home, 77.4% speak English only, and 14.1% speak other languages at home. Approximately 16% of students in Nantucket Public Schools are English Language Learners (ELL). At the state level, 6% of students in public schools are ELL.

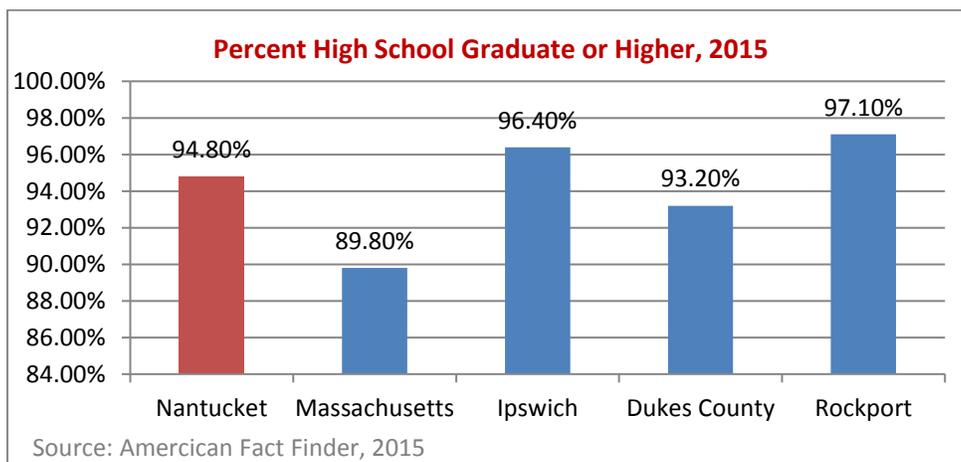
## Citizenship

The majority of Nantucket's population is made up of native US citizens (92%). Many of the year-round residents are native US citizens, but in the summer, there is an increase in the foreign born population due to work and tourism. Nantucket is a popular tourist destination and summer workplace for many US citizens and foreign born populations. The 92% native US citizen statistic is taken from only year-round residents. Of the 8% of Islanders who are foreign born, 6% are not US citizens and 2% are naturalized US citizens. Nantucket has less foreign born residents than Massachusetts (12.2% foreign born). Overall, Nantucket, Massachusetts, and all the comparable towns/counties have a similar citizenship distribution as shown by the graph below.

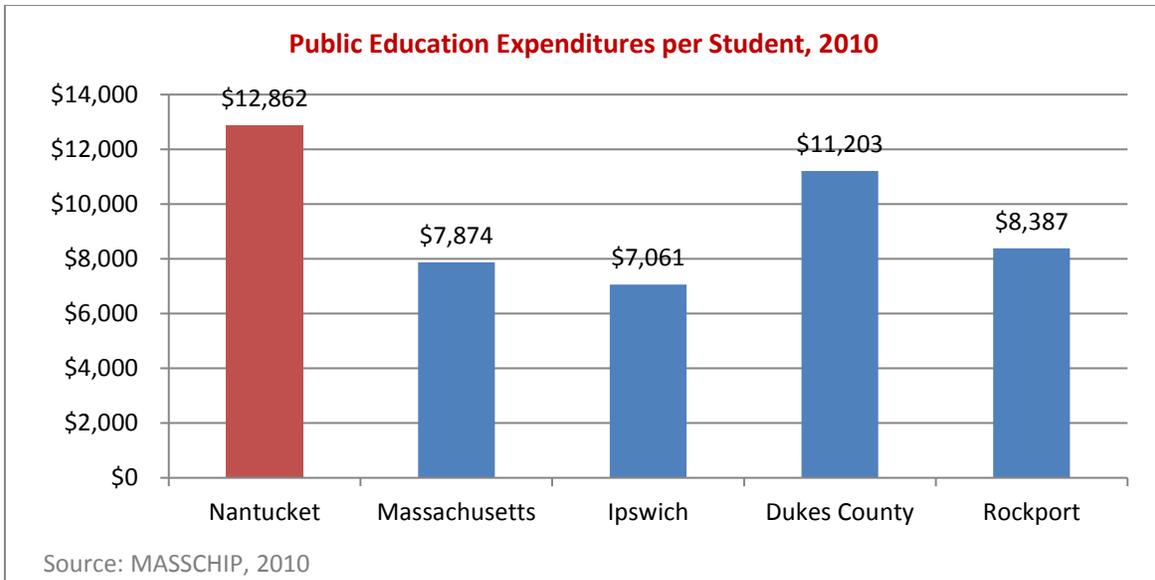


## Education

Compared to the national population of high school graduates (86.7%), Massachusetts and all the listed municipalities have a higher graduated population. Massachusetts has a high school graduate population of 89.9% and Nantucket has a population of 94.8%. Of the comparable towns, Rockport has the highest percent of population who have graduated high school (97.10% respectively). Dukes County has a slightly smaller population of high school graduates when compared to Nantucket (93.2% and 94.8% respectively).

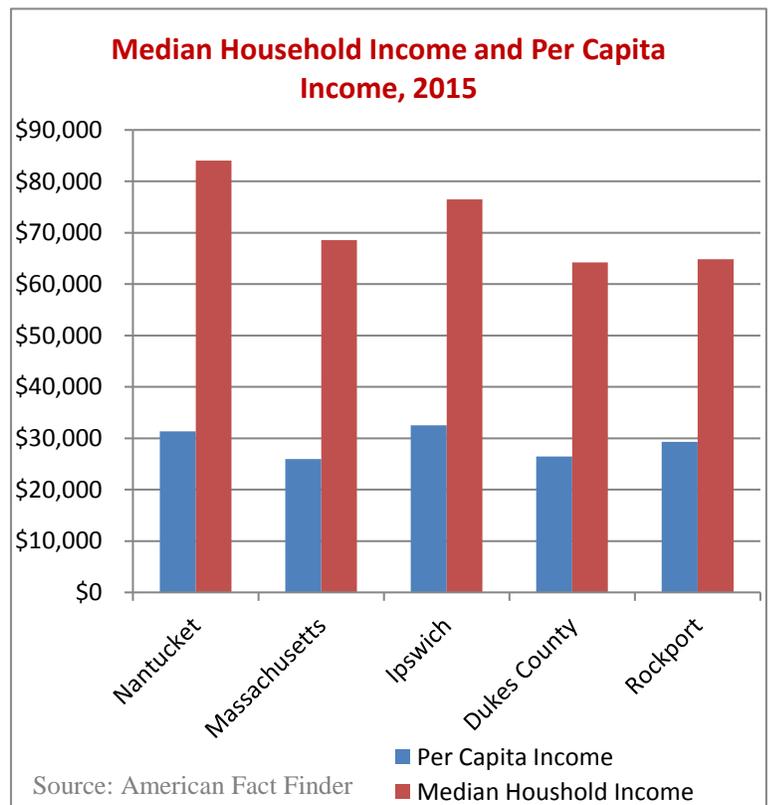


The graph below shows the public education expenditures per student, or the amount of money spent on a single student by the public school system, based on the 2010 census. As shown on the graph, Nantucket has the highest public school expenditure at \$12,862 compared to \$7,874 at the state level. Dukes County is similar to Nantucket at \$11,203, while the other two municipalities are more comparable with the state level spending. Ipswich is the only municipality whose spending is less than the state level (\$7,061 compared to \$7,874).



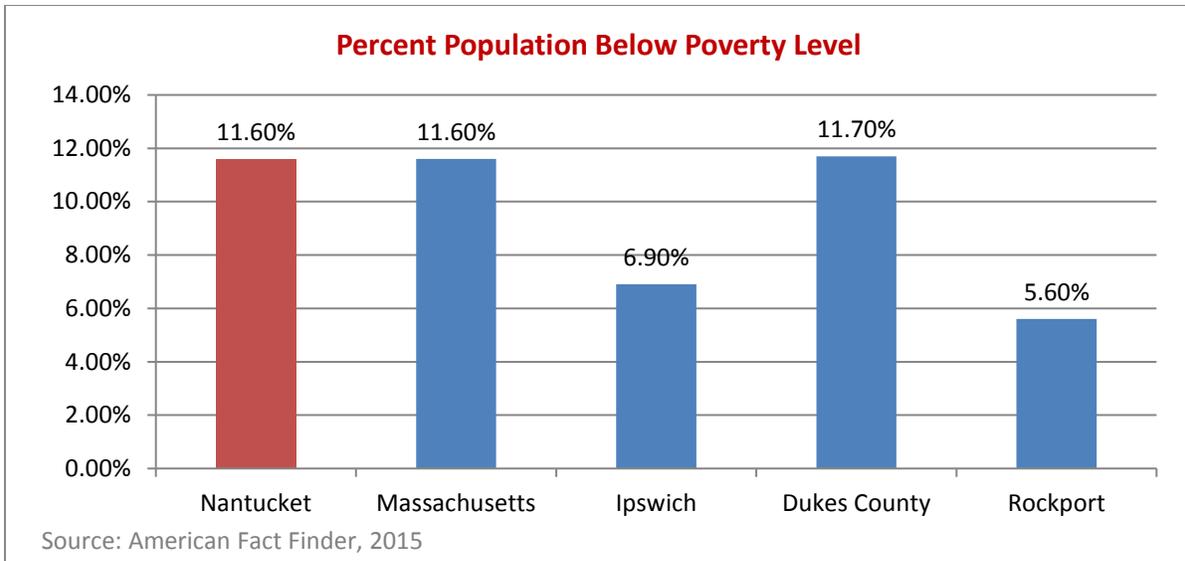
## Income

Median household income on Nantucket (\$84,057) exceeds the state median (\$68,563) by the largest margin. Nantucket's per capita income also exceeds the state level (\$31,314 and \$25,952 respectively). Median household income in Dukes County and Rockport are both lower than the state median. Ipswich has the highest per capita income at \$32,516. According to the Health Assessment done by the Nantucket Cottage Hospital, the annual income needed to afford a two bedroom apartment at fair market value is higher in Nantucket than at a state level (\$71,960 and \$50,090 respectively).



## Poverty

Nantucket's population in poverty is the same as the state level, both 11.60%. Dukes County has a slightly larger percent in poverty when compared to the state (11.7% compared to 11.6%). Both Ipswich and Rockport have lower percentages of people in poverty out of all the municipalities (6.9% and 5.6% respectively).

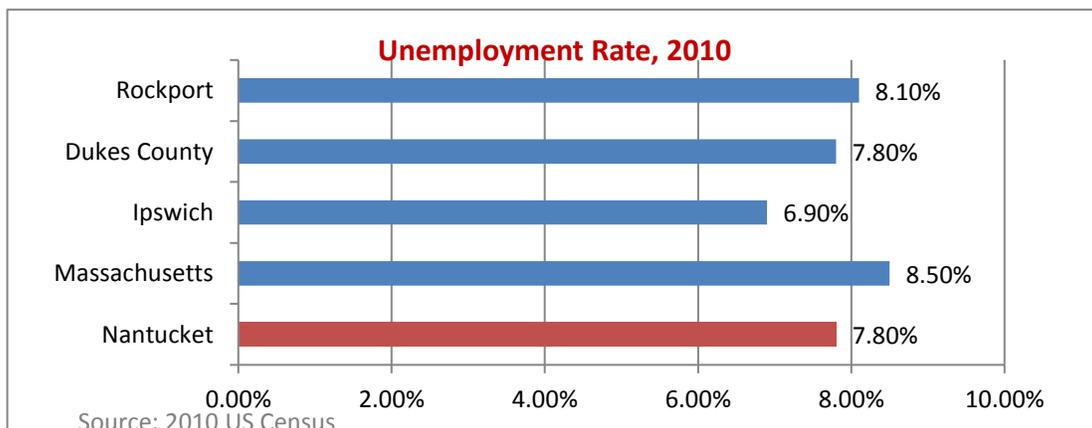


## Public Assistance

According to the 2015 Community Survey, Dukes County had the lowest number of families who received public assistance in the previous twelve months: 82.1 families per 100,000 received public assistance in 2015. Although all the municipalities are below the state rate (2028 per 100,000), Rockport has the highest number of families per 100,000 receiving public assistance of the municipalities (1898.5). Nantucket had 833.6 families per 100,000, and Ipswich had 1087 families per 100,000, both in 2015. About 300 families regularly use the Nantucket Food Pantry.

## Unemployment

As seen in the graph below, all the municipalities have a lower rate of unemployment than the state level. The state's rate of unemployment is 8.5%. Rockport has the highest rate of unemployment of the municipalities at 8.1%, followed by Dukes County and Nantucket at 7.8%. Ipswich has the lowest rate of unemployment of the municipalities at 6.9%. This data is based on the 2010 US Census.



# Social and Physical Environment

## Water Quality

Through the Angler’s Club, Admiralty Club, the town’s Natural Resources Department, as well as the resident scientific community, the island’s residents and visitors have bound together to protect its water quality. The town recently opened its brand new shellfish propagation facility to ensure the sustainability of the island’s shellfish fishery. In order to further protect the water quality, Town Meeting voters recently voted in a \$126 million sewer project, to prevent further water contamination. In further efforts to protect Nantucket’s single-source aquifer (glacial deposit), the town adopted a Best Management Practice handbook for all fertilizer application island-wide. The entire island works together to protect the safety and quality of our fisheries and water.

Of ~1,187 files pulled from the Health Department, only 185 water well reports were found and dated from 1994 – 2017. The results are as follows:

<b>1 or More MCL Exceedance</b>	<b>28.11%</b>
<b>Meeting or Exceeding Sodium MCL</b>	22.7%
<b>Corrosive pH (&lt; 6.5)</b>	37.84%

## Housing

Dukes County has the most housing units of the municipalities (17,446). Nantucket has 11,763, and Ipswich and Rockport have significantly less (5,910 and 4,203 respectively). When comparing the overall cost of living, Nantucket has a much higher index than the state level (203 and 144). The cost of housing index is also much higher for Nantucket when compared to the state (400 and 187). The median home value on Nantucket is \$929,700, which is almost triple the price of the state median (\$330,100).

## Transportation

The majority of people state-wide and on Nantucket take a car, truck, or van to work (80% and 76.1%). The second-most popular mode of transportation on the island is walking to work (11.2%), followed by biking (4.1%) and public transportation (1.4%). At the state level, the second-most popular mode of transportation is public transportation (9.3%), followed by walking to work (4.7%) and biking (0.7%). On Nantucket, the only form of public transportation is the bus system, The Wave; however, it only runs from May to October which limits transportation

for year-round residents. This may explain why public transportation is the least popular mode of transportation on the island.

## Crime and Safety

The following data was received from the 2017 Alliance for Substance Abuse and Prevention Pride Survey done at Nantucket High School. The students surveyed were in grades 9-11 and the population was 50% female, 50% male.

The table below assesses the risky behaviors and factors of the school and town environment for the students in grades 9-11. The factors that involve the most students are being in trouble with the police (21.7%), being afraid another student might hurt them (22.2%), had a student threaten to hit, slap, or kick (17.2%), and threatened to hurt a student by hitting, slapping, or kicking (16.9%).

Risk Factors

Factor	Percent at Risk
Possession of a gun NOT at School	4
Possession of a gun AT School	2.3
Gang Activity	4
Contemplated Suicide	5.3
Trouble with Police	21.7
Threatened a student with a gun, knife, or club	2.3
Threatened to hurt a student by hitting, slapping, or kicking	16.9
Hurt a student with a gun, knife, or club	1.9
Hurt a student by hitting, slapping, or kicking	14.2
Been threatened with a gun, knife, or club	3.8
Had a student threaten to hit, slap, or kick	17.2
Been afraid a student may hurt you	22.2
Been hurt by a student with a gun, knife or club	1.2
Been hurt by a student by hitting, slapping, or kicking	11.1

Source: ASAP Pride Survey, 2017

The table below addresses positive factors that may affect the school and town environment for the students in grades 9-11. These factors and behaviors are positive, and are alternatives to the risky behaviors in the table above. Almost  $\frac{3}{4}$  of students report making good grades (74.8%). 28.1% report taking part in community activities and 27.6% report taking part in school activities. Only about 30% of parents talk to their students about the dangers of drugs and 25.3% of teachers address it.

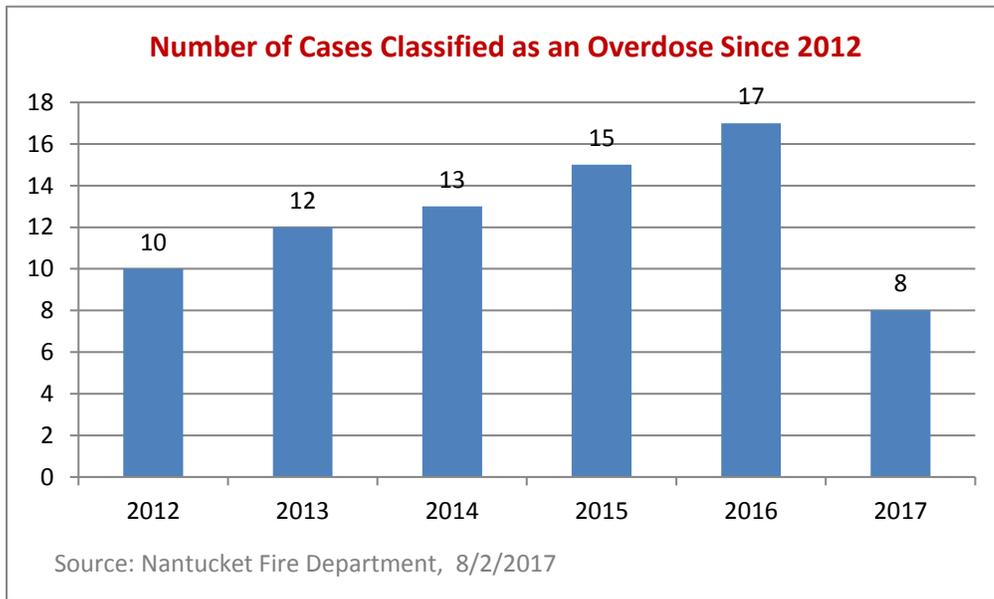
Protective Factors

Factor	Percent Protected
Makes good grades	74.8
Attend church or synagogue	17.1
Take part in community activities	28.1
Take part in school activities	27.6
Teachers talk about the dangers of drugs	25.3
Parents talk about the danger of drugs	30.9

Source: ASAP Pride Survey, 2017

## Alcohol and Drug Use

The Nantucket Fire Department reports 623 dangerous drug cases on island in the past ten years (since 2007). Below is a chart of the uses of Narcan by the Fire and Police Departments on island since first responders were given Narcan in 2015. Since 2015, the Police Department reports 18 uses of Narcan as of June, 2017. The following chart shows a consistent increase in overdose cases from 2012 to 2016. Based on 8 overdoses reported as of August 2, 2017, Nantucket can estimate at least 12 overdoses for 2017 if the trend continues. According to the Fire Department, there were no overdoses or uses of Narcan in the month of July. Below is a breakdown of cases classified as overdoses since 2012.



The table below compares the use of certain drugs with their perceived risk and parental/friend disapproval. The drugs that students associate with having a higher risk also have a lower past 30 day use percentage, such as Cigarettes/tobacco and prescription drugs. Both have a high

perceived risk (87.8% and 87.1%) and a low 30 day use statistic (5.2% and 3.1%). Marijuana has a significantly lower perceived risk when compared to the other listed drugs. Only 36.4% of students consider marijuana risky. It also has the highest 30 day use percentage (26.6%) and has a very low friend disapproval rate (33.5% compared to alcohol at 68%)

Core Measures for All Students

Measure	Cig/Tob	Alcohol	Marijuana	Presc. Drugs
Past 30 Day Use	5.2	25.8	26.6	3.1
Perceived Risk	87.8	67.5	36.4	87.1
Parental Disapproval	91	84.6	72.8	93.9
Friend Disapproval	70.3	68	33.5	84

Source: ASAP Pride Survey, 2017

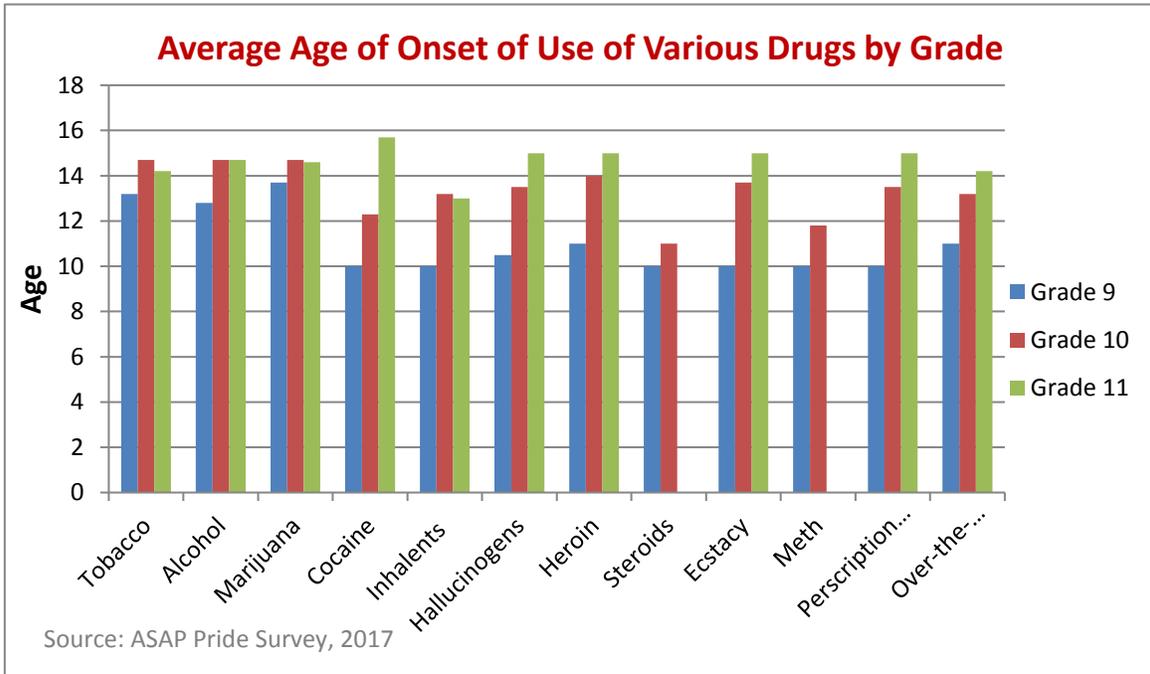
The following table displays when students report using drugs/alcohol. Based on the table below, most students are using drugs/alcohol on the weekends. Alcohol and marijuana are the most used substances on the weekends (23.3% and 21.1%). Although use of tobacco, prescription drugs, and alcohol is low at all times during the week, marijuana use is prevalent on weekdays. About 4.2% of students report using marijuana before school, 8.3% after school, and 9.1% on week nights.

When do Students Report Using

Drug	Before School	During School	After School	Week Night	Weekend
Tobacco	1.1	0.6	1.9	2.2	5.3
Alcohol	0.6	0.3	2.5	3	23.3
Marijuana	4.2	1.7	8.3	9.1	21.1
Presc. Drugs	0.8	0.6	0.3	0.6	0.6

Source: ASAP Pride Survey, 2017

The following graph displays the average age of onset of various drugs by grade. Based on the graph, the 9<sup>th</sup> grade class has a lower age of onset for all reported drugs. This statistic is slightly alarming because it implies that the younger students were exposed to drugs earlier than their older classmates. If this trend continues, each year, the incoming freshman's onset of drug use will be at a younger age than that of their older classmates. The 11<sup>th</sup> graders average onset of drug use is around ages 13-14. They have no reported use of steroids or meth, where as the 9<sup>th</sup> and 10<sup>th</sup> graders show onset of steroid and meth use around ages 10-12.



# Health Indicators

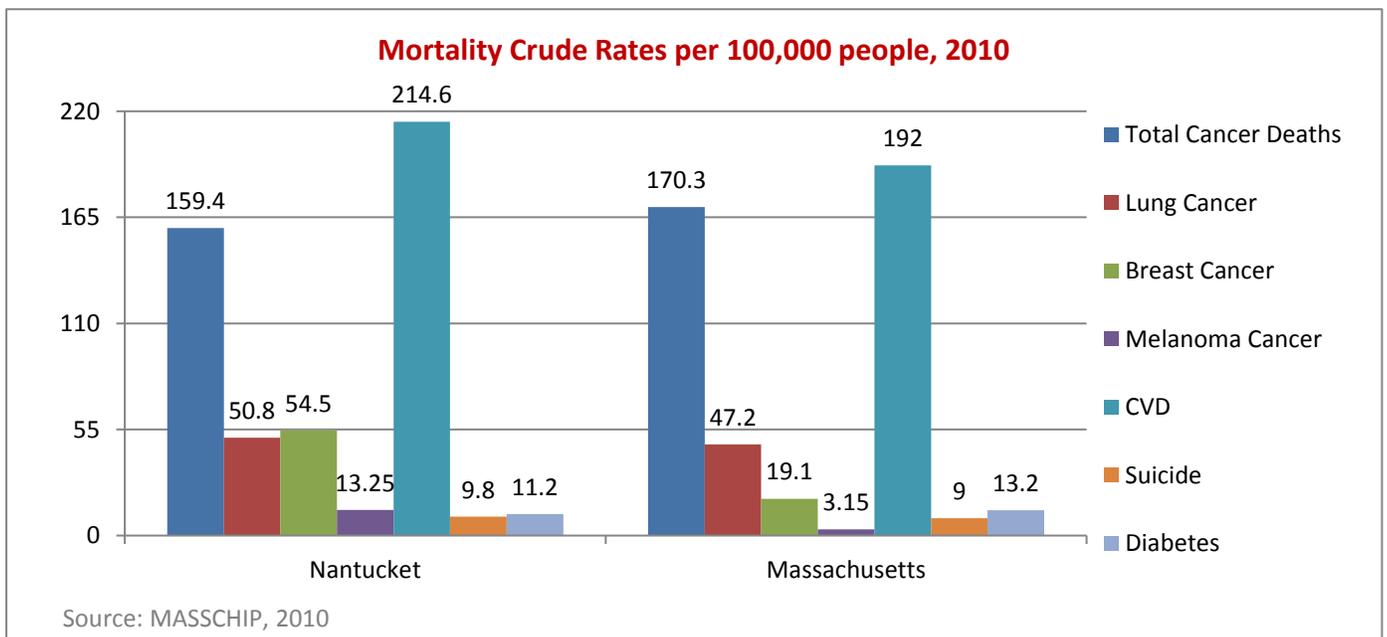
## Overall Health

Based on the CHA survey, 50% of Nantucketers think Nantucket is healthy or very healthy.” 61.5% think Nantucket has a good quality of life, and 55.2% of Nantucketers think Nantucket is a good place to raise children. The most common answers when asked “what makes Nantucket healthy” were the focus on environmental health, and its’ ample opportunities to be active. When asked what prevents Nantucketers from being healthy, the most common responses included money, and lack of health care services.

## Mortality

Nantucket has the highest death rate when compared with the other municipalities; however, none of the municipalities, including Nantucket, have a death rate as high as the state level. The state death rate is 667.8 per 100,000 people. Nantucket is slightly lower at 632.6 deaths per 100,000 people. Ipswich and Dukes County are very similar (612.9 and 617.4), and Rockport has the lowest death rate at 577.8 deaths per 100,000 people.

Below is a chart that shows some chosen specific death rates. Based on the chart below, Nantucket has a cardio vascular disease death rate higher than that of the state (214.5 and 192). The breast cancer and melanoma death rates on Nantucket are higher than the state level. Nantucket has a breast cancer death rate of 54.5 deaths per 100,000 people compared to 19.1 deaths per 100,000 people state-wide. The melanoma death rate on Nantucket is 13.25 deaths per 100,000 people and the state melanoma death rate is 3.15 deaths per 100,000 people.



## Infant Mortality

Based on the 2010 US census, Nantucket has a higher infant mortality rate than the other municipalities which all have an infant death rate of 0 deaths per 100,000 people. Nantucket's infant death rate is 2.5 deaths per 100,000 people. The only reported infant death on Nantucket that was included in the 2010 census was a Hispanic infant.

## Mental Health

Mental health has been identified as a health concern on Nantucket by numerous residents. Fairwinds Counseling Center treats people on Nantucket for mental health issues including addiction and other substance use issues. Those statistics can be found under the Alcohol and Drug Use section. Fairwinds has seen 442 people in the last twelve months (as of July 2017) for mental health counseling. They have had 765 face-to-face crisis encounters from 2010 to 2015. The breakdown of those encounters can be seen in the chart below. This does not include over-the-phone crisis encounters, only face-to-face.

Year	Number of Face-to-Face Encounters
2010	125
2011	156
2012	159
2013	93
2014	143
2015	89

Source: Fairwinds Counseling Center, 2010-2015

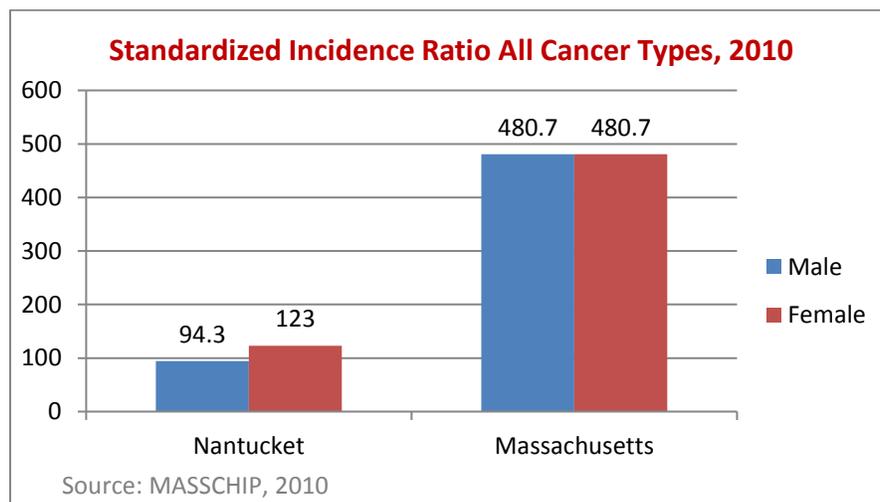
### *Suicide*

Suicide and self-inflicted injuries are a significant public health problem; luckily, they are largely preventable. According to the CDC, Massachusetts has a lower suicide rate when compared to the rest of the United States. In 2014, the age-adjusted rate for the US was 12.9 per 100,000 people compared to 9.0 per 100,000 people in Massachusetts. The reported suicide rate for Nantucket as of 2010 was 9.8/100,000 according to the 2010 US Census. In 2014, the number of suicides in Massachusetts was more than 1.9 times higher than the number of motor vehicle traffic-related deaths and 4 times higher than homicides. Males make up the majority of suicides in MA (77%). The suicide rates for males and females have been steadily increasing from 2004-2014, the rate of suicides for males increased 29% and 48% for females. In Massachusetts, 54% of suicide victims in 2014 had a documented current mental health problem and 38% were currently receiving treatment for a mental health or substance abuse problem. Suicide is a significant public health issue for Nantucket. From October 2014-February 2015 seven Islanders committed suicide. Even more concerning, this is not an unusual occurrence. More recently, there were seven suicides in February and March of 2017; three were in one week.

## Chronic Disease

### Cancer

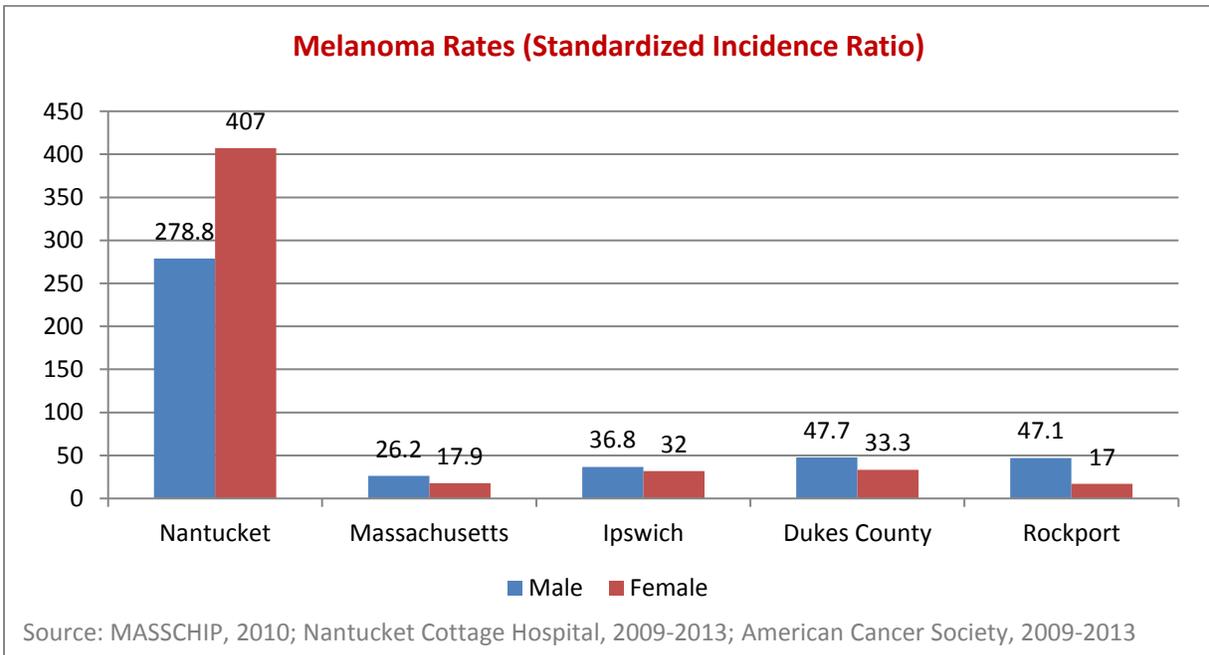
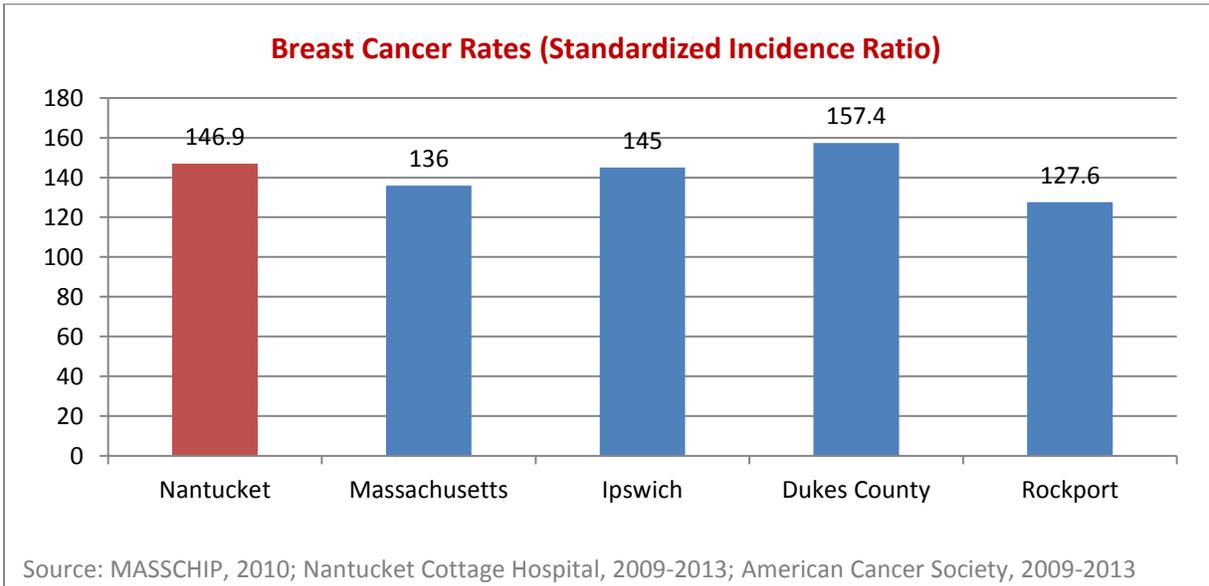
When compared with the state standardized incidence ratio for all types of cancer, Nantucket has a lower cancer incidence. At the state level, males and females have equal standardized incidence ratios (both 480.7). On Nantucket, males have a standardized incidence ratio of 94.3 while females have a standardized incidence ratio of 123. Although these statistics are both lower than the state level, it shows there is a slight health disparity among women in regards to cancer incidence.



The following two charts display standardized incidence ratios for breast cancer and melanoma (Skin Cancer). Breast cancer and melanoma were identified as areas of focus for Nantucket after Nantucket Cottage Hospital received the cancer data for 2009-2013. The breast cancer standardized incidence ratios for Nantucket, Ipswich, and Dukes County are all higher than the state level (146.9, 145, and 157.4 compared to 136). Rockport's standardized incidence ratio is lower than the state's at 127.6. Although Nantucket's standardized ratio isn't much different than the comparable data, it was chosen as a priority area because there was a statically significant excess in the number of breast cancer cases from 2009-2013 on Nantucket.

The American Cancer Society found that Nantucket has the fifth highest incidence rate of skin cancer in the country, with an observed case count of 25 in men and 17 in women between 2007 and 2011, a 373.1 standardized incidence ratio for men, and a 326.8 standardized incidence ratio for women; both of which are statistically significantly higher than the expected number. The chart displaying melanoma standardized incidence ratios shows a more severe picture than the breast cancer chart. Nantucket, Ipswich, Dukes County, and Marshfield are all above the state level for melanoma standardized incidence ratios. While the other comparable towns/counties are slightly above the state ratio, Nantucket has rates more than ten times as high. For males on Nantucket, the melanoma standardized incidence ratio is 278.8 and for females it is 407

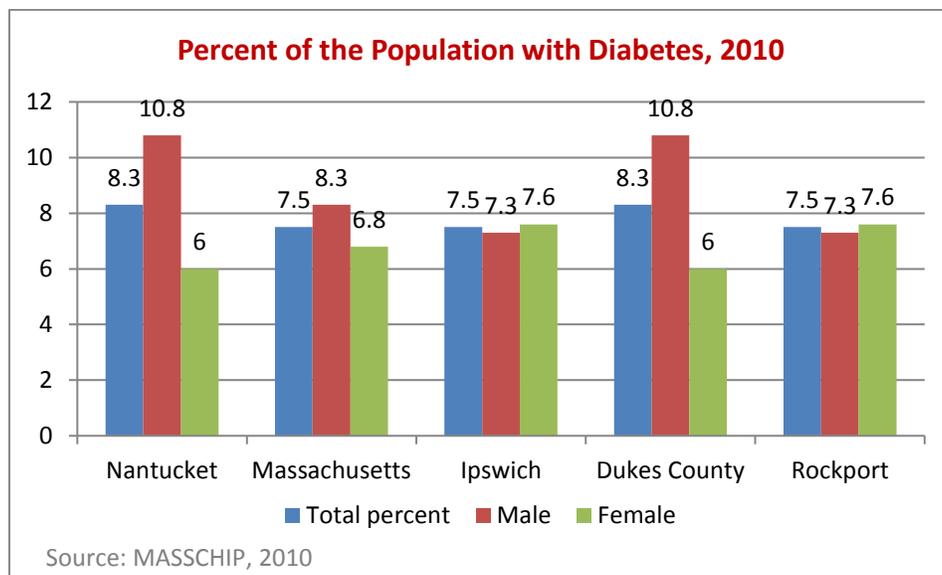
compared to 26.2 for males at the state level and 17.9 for females. This is clearly an issue for Nantucket, but luckily, melanoma is completely preventable. Similarly to breast cancer, melanoma was chosen as a priority area because there was a statistically significant excess in the number of melanoma cases from 2009-2013 on Nantucket, as reported by the Nantucket Cottage Hospital.



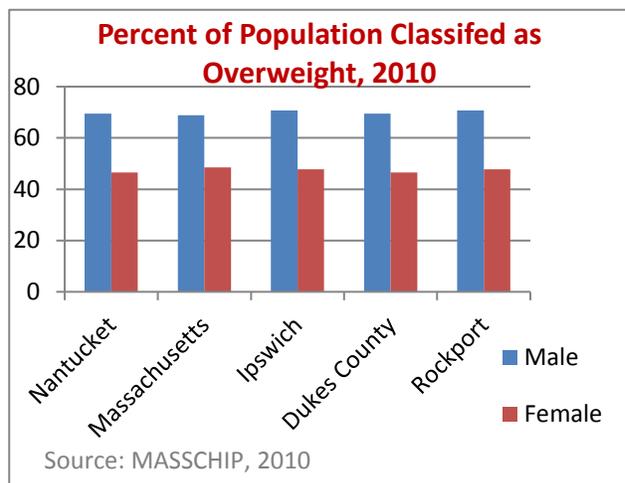
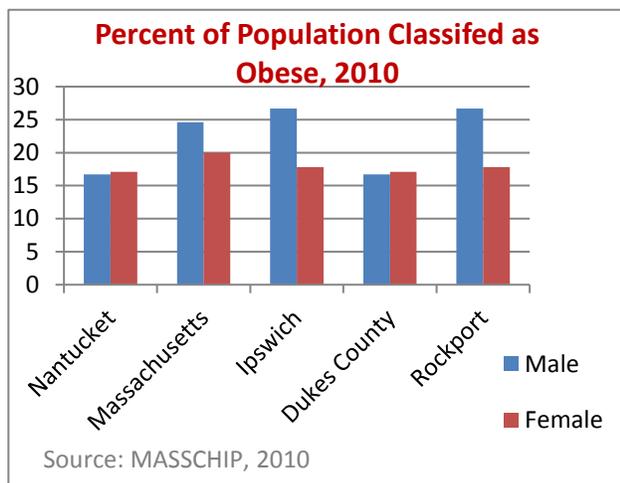
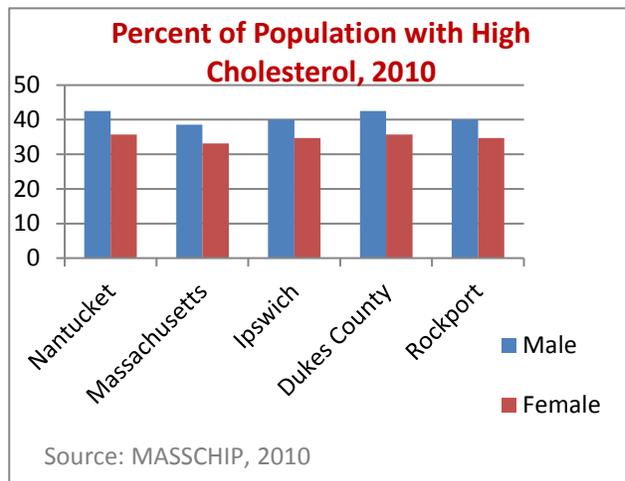
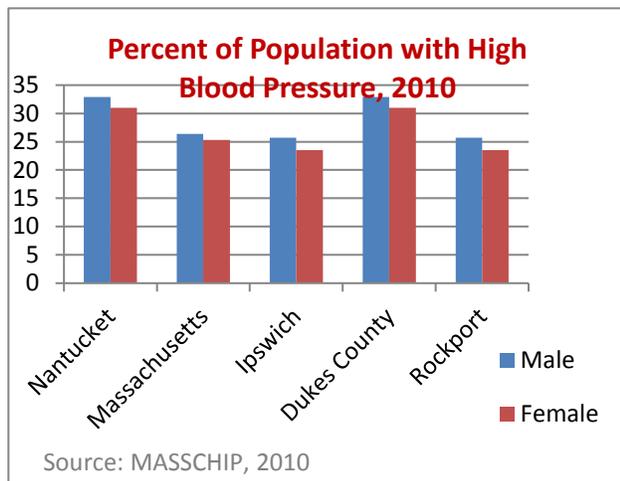
## Diabetes

The Diabetes section of this report is only focused on type II diabetes since it can be prevented by a healthy lifestyle. Type II diabetes is a chronic disease that is caused by a number of lifestyle

choices including high blood pressure, overweight, obesity, and high cholesterol to name a few. Harvard University states that as of 2017, “two out of three adults and one out of three children in the United States are overweight or obese.” The Centers for Disease Control and Prevention (CDC) released a statement in 2010 stating “[the] number of Americans with diabetes [is] projected to double or triple by 2050.” It is our duty as a community to work towards preventing this from happening on Nantucket. Below is a chart displaying the percentages of diabetes in each of the chosen populations. Nantucket and Dukes County have the highest percent of diabetes at 8.3% overall and 10.8% for males. Ipswich and Rockport have the highest percentage of female diabetes at 7.6%. This data was taken from the 2010 US Census so it is likely that the data has changed given the trends that the US is following in regards to the obesity epidemic.



The following four charts show the percentages of diabetes risk factors in the chosen populations. Nantucket and Dukes County have the highest percentages of high blood pressure, and high cholesterol when compared to the state level and the other comparable towns. All of the comparable towns/counties have almost the exact same percentages of overweight males and females when compared to the state level. Nantucket and Dukes County have lower percentages of obesity when compared to the state and the other comparable towns. This data suggests that the high percentages of diabetes in Nantucket and Dukes County might be attributed to high percentages of high blood pressure and high cholesterol, not overweight or obesity.



## Infectious Disease

### HIV/AIDS

Nantucket has the highest prevalence of HIV/AIDS of the municipalities. All of the municipalities have a lower prevalence than the state. Massachusetts has an HIV/AIDS prevalence of 301.5 per 100,000 people. Nantucket and Dukes County follow with 239.6 per 100,000 people, then Ipswich with 128 per 100,000 people. Rockport did not have enough cases to report. 70% of people who have reported having HIV/AIDS in Nantucket and Dukes Counties are white (non-Hispanic).

### STDs

For all of the major STDs, Nantucket has a lower rate per 100,000 people than the state based on data from the Massachusetts Department of Public Health. For Chlamydia, Nantucket's rate is 291.7 compared to 313.3 at the state level. Nantucket's Gonorrhea rate per 100,000 people is

24.6 while the state's is 42.3. Lastly, Nantucket's rate for Syphilis is too small to be able to report and is therefore below the state rate of 8.5. Overall, Nantucket has a low incidence of STDs when compared with the state.

## Other Communicable Diseases

### Tick-Borne Illnesses

Nantucket has the heaviest burden of Lyme disease in Massachusetts. In addition to Lyme, Nantucket also faces higher rates of Babesiosis and Human Granulocytic Anaplasmosis, both tick-borne illnesses. A relatively new tick borne illness, Human Powassan (POW) virus has been discovered more frequently on Cape Cod since 2015. Human Powassan virus is potentially deadly, and luckily, there have been no cases of it on Nantucket as of July 2017.

Tick Bourne Diseases	Nantucket	Massachusetts
2013 Lyme Disease Incidence Rate	570	86
2014 Babesiosis Incidence Rate	353.9	7.9
2014 Human Granulocytic Anaplasmosis Incidence Rate	88.5	9.2

Source: Nantucket Cottage Hospital

## Health Equity

Health equity is achieved when all people, regardless of social position or other socially-determined circumstances, have an equal opportunity to be healthy. Centers for Disease Control & Prevention states that health equity occurs when “every person has the opportunity to attain his or her full health potential and no one is disadvantaged from achieving this potential because of social position or other socially-determined circumstances. Health inequalities are reflected in differences in length of life; quality of life; rate of disease, disability, and death; severity of disease, and access to treatment.” All around the world, people experience barriers to accessing health care because of language, transportation, poverty, and racism among other reasons. Health equity is something that Nantucket is always striving to achieve.

## Access to Care

Although health equity is what all communities strive for, there are always health disparities. When it comes to health disparities, access to care is one of the most widespread. Access to care includes distance to health services, ability to receive health care, and generally a sense of equality and fairness when receiving health care services. When asked what issues make it difficult to get healthcare on Nantucket, the most common answers were lack of evening and weekend hours, long waits for care, and cost of care.

According to the US Census Bureau, 10.4% of the US population, or 33 million people, were uninsured in 2014. For those 33 million, all healthcare costs had to be paid out-of-pocket, which can be impossible for families who struggle financially. The following table displays the percentages of the Nantucket and Massachusetts population with health insurance based on the 2010 US Census. For both Nantucket and Massachusetts, the white, non-Hispanic population has the highest percentages of health insurance (95.3% and 94.1%). At the state level, Asian/Pacific Islanders have the next highest percentage (92.9%), where as only 65.7% of Asian/Pacific Islanders on Nantucket have health insurance. The population with the least health insurance coverage is the Hispanic population, both at a state level and on Nantucket (62.5% Nantucket and 78.6% MA).

<b>% of Population with Health Insurance</b>	<b>Nantucket</b>	<b>Massachusetts</b>
White non-Hispanic	95.3	94.1
Black non-Hispanic	91.4	88.1
Hispanic	62.5	78.6
Asian/Pacific Islander	65.7	92.9

Source: 2010 US Census

For the many people who are not covered by health insurance, out-of-pocket costs can limit their ability to receive medical care. Although emergency rooms are legally required to treat any patient regardless of financial status, many patients will hold off on getting care out of fear that it will put them in debt. Below is a table displaying the percentages of different populations that could not seek medical care due to its' high cost. The data is strongly correlated with the table above. The populations with the highest percentage of health insurance coverage have the lowest percentages of cost related difficulties. The populations with the lowest health insurance coverage have the highest percentage of cost related difficulty.

<b>Could not see Doctor due to Costs</b>	<b>Nantucket</b>	<b>Massachusetts</b>
White non-Hispanic	5.9	6.3
Black non-Hispanic	11.7	13.6
Hispanic	21.3	17.1
Asian/Pacific Islander	58.6	6.3

Source: American Fact Finder. 2015

## Cultural Competency

Making sure that people feel safe and comfortable receiving health care is a very important part of health equity. Everyone deserves to feel comfortable in their community, and cultural competency is always a priority for the town of Nantucket. When people feel discriminated against in a health care facility, they are less likely to return for follow-up care which results in health disparities. When asked about discrimination on Nantucket, the results were as follows:

12.8% have felt discriminated against for their SKIN COLOR/RACE/ETHNICITY

10.5% have felt discriminated against for their SEXUAL ORIENTATION

25.6% have felt discriminated against for their AGE

15.3% have felt discriminated against for their CULTURAL BACKGROUND

35.8% have felt discriminated against for their INCOME

10.2% have felt discriminated against for their GENDER IDENTIFICATION

## Priorities

### Priority 1: Mental Health

#### *Why is this Important?*

According to the CDC, “mental illness is defined as health conditions that are characterized by alterations in thinking, mood, or behavior associated with distress and/or impaired functioning.” Depression is the most common mental illness, affecting more than 26% of the US adult population. Evidence has shown that mental disorders, especially depressive disorders are strongly related to the occurrence, successful treatment, and course of many chronic diseases including diabetes, cancer, cardiovascular disease, asthma, and obesity and many risk behaviors for chronic disease; such as physical inactivity, smoking excessive drinking, and insufficient sleep. Mental illness is also strongly correlated with suicide.

#### *Nantucket’s Current Status*

Mental health has been identified as a health concern on Nantucket by numerous residents. Fairwinds Counseling Center treats people on Nantucket for mental health issues including addiction and other substance use issues. Those statistics can be found under the Alcohol and Drug Use section. Fairwinds has seen 442 people in the last twelve months (as of July 2017) for mental health counseling. They have had 765 face-to-face crisis encounters from 2010 to 2015. The breakdown of those encounters can be seen in the chart below. This does not include over-the-phone crisis encounters, only face-to-face.

Year	Number of Face-to-Face Encounters
2010	125
2011	156
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2013	93
2014	143
2015	89

Source: Fairwinds Counseling Center, 2010-2015

Suicide and self-inflicted injuries are a significant public health problem; luckily, they are largely preventable. According to the CDC, Massachusetts has a lower suicide rate when compared to the rest of the United States. In 2014, the age-adjusted rate for the US was 12.9 per 100,000 people compared to 9.0 per 100,000 people in Massachusetts. The reported suicide rate for Nantucket as of 2010 was 9.8/100,000 according to the 2010 US Census. In 2014, the number of suicides in Massachusetts was more than 1.9 times higher than the number of motor vehicle traffic-related deaths and 4 times higher than homicides. Males make up the majority of suicides in MA (77%). The suicide rates for males and females have been steadily increasing from 2004-

2014, the rate of suicides for males increased 29% and 48% for females. In Massachusetts, 54% of suicide victims in 2014 had a documented current mental health problem and 38% were currently receiving treatment for a mental health or substance abuse problem. Suicide is a significant public health issue for Nantucket. From October 2014-February 2015 seven Islanders committed suicide. Even more concerning, this is not an unusual occurrence. More recently, there were seven suicides in February and March of 2017; three were in one week.

#### *Available Resources*

Fairwinds Counseling Center

Hyannis Vet Center

Nantucket Cottage Hospital

Private Practices

Samaritans on Cape Cod & the Islands Crisis Line

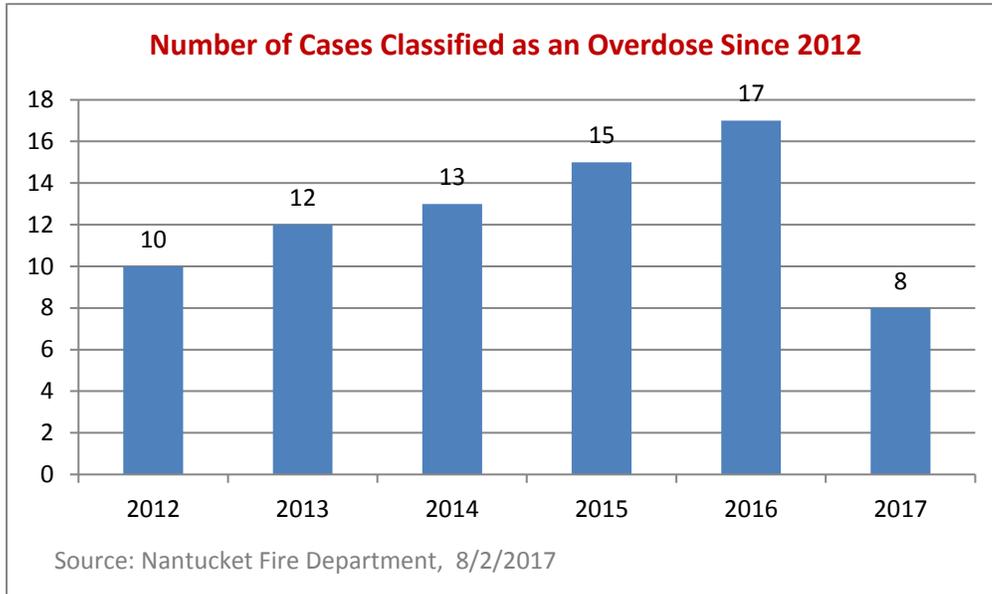
## **Priority 2: Substance Use/Abuse**

### *Why is this Important?*

Alcohol and other drug use is a high priority for the Nantucket Community. According to Healthy People 2020, “substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These problems include teenage pregnancy, HIV/AIDS, STDs, domestic violence, child abuse, motor vehicle accidents, fights, crime, homicide, and suicide.” Based on the CHA Survey, substance abuse was ranked as the top concern when asked about what health issues had the greatest impact on Nantucket.

### *Nantucket’s Current Status*

The Nantucket Fire Department reports 623 dangerous drug cases on island in the past ten years (since 2007). Below is a chart of the uses of Narcan by the Fire and Police Departments on island since first responders were given Narcan in 2015. Since 2015, the Police Department reports 18 uses of Narcan as of June, 2017. The following chart shows a consistent increase in overdose cases from 2012 to 2016. Based on 8 overdoses reported as of August 2, 2017, Nantucket can estimate at least 12 overdoses for 2017 if the trend continues. According to the Fire Department, there were no overdoses or uses of Narcan in the month of July. Below is a breakdown of cases classified as overdoses since 2012.



The table below compares the use of certain drugs with their perceived risk and parental/friend disapproval. The drugs that students associate with having a higher risk also have a lower past 30 day use percentage, such as Cigarettes/tobacco and prescription drugs. Both have a high perceived risk (87.8% and 87.1%) and a low 30 day use statistic (5.2% and 3.1%). Marijuana has a significantly lower perceived risk when compared to the other listed drugs. Only 36.4% of students consider marijuana risky. It also has the highest 30 day use percentage (26.6%) and has a very low friend disapproval rate (33.5% compared to alcohol at 68%)

Core Measures for All Students

Measure	Cig/Tob	Alcohol	Marijuana	Presc. Drugs
Past 30 Day Use	5.2	25.8	26.6	3.1
Perceived Risk	87.8	67.5	36.4	87.1
Parental Disapproval	91	84.6	72.8	93.9
Friend Disapproval	70.3	68	33.5	84

Source: ASAP Pride Survey, 2017

The following table displays when students report using drugs/alcohol. Based on the table below, most students are using drugs/alcohol on the weekends. Alcohol and marijuana are the most used substances on the weekends (23.3% and 21.1%). Although use of tobacco, prescription drugs, and alcohol is low at all times during the week, marijuana use is prevalent on weekdays. About

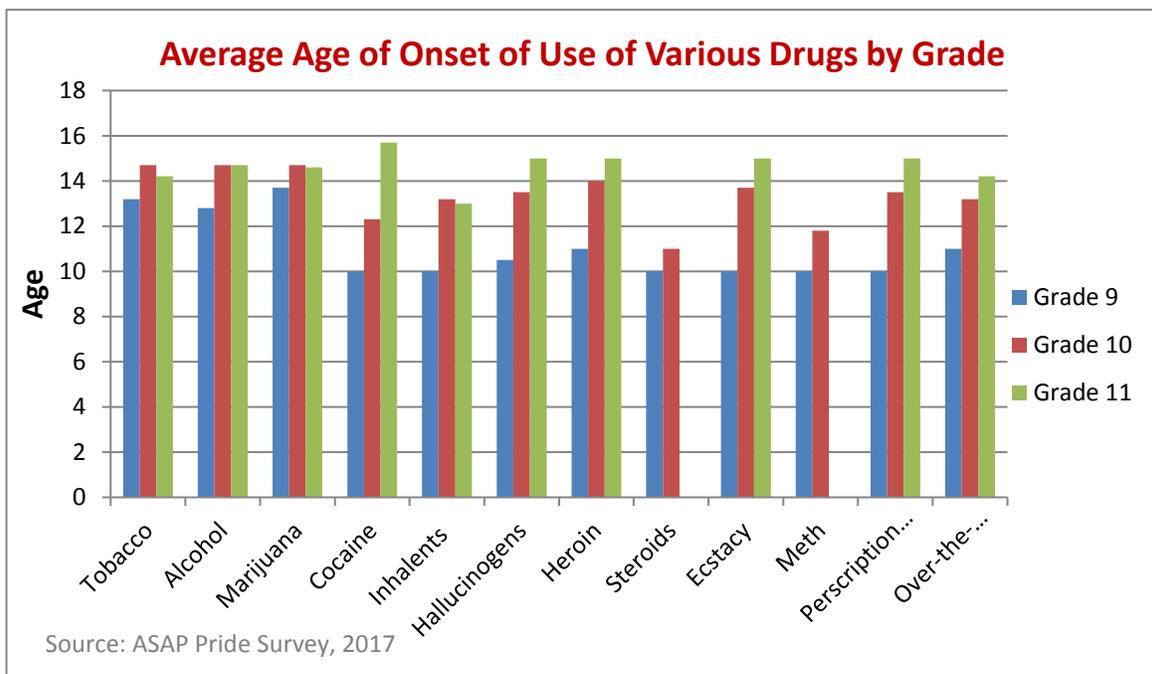
4.2% of students report using marijuana before school, 8.3% after school, and 9.1% on week nights.

When do Students Report Using

Drug	Before School	During School	After School	Week Night	Weekend
Tobacco	1.1	0.6	1.9	2.2	5.3
Alcohol	0.6	0.3	2.5	3	23.3
Marijuana	4.2	1.7	8.3	9.1	21.1
Presc. Drugs	0.8	0.6	0.3	0.6	0.6

Source: ASAP Pride Survey, 2017

The following graph displays the average age of onset of various drugs by grade. Based on the graph, the 9<sup>th</sup> grade class has a lower age of onset for all reported drugs. This statistic is slightly alarming because it implies that the younger students were exposed to drugs earlier than their older classmates. If this trend continues, each year, the incoming freshman’s onset of drug use will be at a younger age than that of their older classmates. The 11<sup>th</sup> graders average onset of drug use is around ages 13-14. They have no reported use of steroids or meth, where as the 9<sup>th</sup> and 10<sup>th</sup> graders show onset of steroid and meth use around ages 10-12.



### *Available Resources*

Al-Anon

Family and Children's Services of Nantucket

Gosnold on Cape Cod

Nantucket Cottage Hospital

Nantucket Fire Department

Nantucket Police Department

## **Priority 3: Lack of Affordable Housing**

### *Why is this Important?*

The inadequate supply of affordable housing to low-income families is among one of the most prevalent community health concerns related to family housing. When affordable housing is not available to low-income households, money that would be used for food, medical or dental care, and other necessities are diverted to housing costs. According to the CDC, "safe affordable housing is a basic necessity for every family. Without a decent place to live, people cannot be productive members of society, children cannot learn, and families cannot thrive."

### *Nantucket's Current Status*

When comparing the overall cost of living, Nantucket has a much higher index than the state level (203 and 144). The cost of housing index is also much higher for Nantucket when compared to the state (400 and 187). The median home value on Nantucket is \$929,700, which is almost triple the price of the state median (\$330,100). For middle class and low income families and individuals, housing is major issue on Nantucket. The cost of living is inflated, and the access to affordable housing is very limited.

### *Available Resources*

Nantucket Lodging Association

Visitor Services

## **Priority 4: Access to Health Care**

### *Why is this Important?*

Access to health care is critical to population and community health, to treat illness, to prevent disease, and to promote good health. Often differential access to care can cause health disparities

among diverse populations and poorer health outcomes. Barriers to health care can include financial barriers, such as lack of health insurance. Non-financial barriers can include a shortage of providers, transportation, language issues, cultural differences, timeliness, and availability of appointments, and disabilities.

Based on the CHA Survey, participants ranked the following top five issues that make it difficult for them to get care:

1. Lack of evening/weekend hours
2. Long waits for appointments
3. Cost of care
4. No available provider near me
5. Health care information is not kept confidential

### *Nantucket's Current Status*

Although health equity is what all communities strive for, there are always health disparities. When it comes to health disparities, access to care is one of the most widespread. Access to care includes distance to health services, ability to receive health care, and generally a sense of equality and fairness when receiving health care services. When asked what issues make it difficult to get healthcare on Nantucket, the most common answers were lack of evening and weekend hours, long waits for care, and cost of care.

According to the US Census Bureau, 10.4% of the US population, or 33 million people, were uninsured in 2014. For those 33 million, all healthcare costs had to be paid out-of-pocket, which can be impossible for families who struggle financially. The following table displays the percentages of the Nantucket and Massachusetts population with health insurance based on the 2010 US Census. For both Nantucket and Massachusetts, the white, non-Hispanic population has the highest percentages of health insurance (95.3% and 94.1%). At the state level, Asian/Pacific Islanders have the next highest percentage (92.9%), where as only 65.7% of Asian/Pacific Islanders on Nantucket have health insurance. The population with the least health insurance coverage is the Hispanic population, both at a state level and on Nantucket (62.5% Nantucket and 78.6% MA).

<b>% of Population with Health Insurance</b>	<b>Nantucket</b>	<b>Massachusetts</b>
White non-Hispanic	95.3	94.1
Black non-Hispanic	91.4	88.1
Hispanic	62.5	78.6
Asian/Pacific Islander	65.7	92.9

Source: 2010 US Census

For the many people who are not covered by health insurance, out-of-pocket costs can limit their ability to receive medical care. Although emergency rooms are legally required to treat any

patient regardless of financial status, many patients will hold off on getting care out of fear that it will put them in debt. Below is a table displaying the percentages of different populations that could not seek medical care due to its' high cost. The data is strongly correlated with the table above. The populations with the highest percentage of health insurance coverage have the lowest percentages of cost related difficulties. The populations with the lowest health insurance coverage have the highest percentage of cost related difficulty.

<u>Could not see Doctor due to Costs</u>	<u>Nantucket</u>	<u>Massachusetts</u>
White non-Hispanic	5.9	6.3
Black non-Hispanic	11.7	13.6
Hispanic	21.3	17.1
Asian/Pacific Islander	58.6	6.3

Source: American Fact Finder. 2015

*Available Resources*

Nantucket Cottage Hospital

Nantucket Health Department

**Priority 5: Tick-borne Illnesses**

*Why is this Important?*

In communities where tick-borne illnesses are prevalent, it can affect the community in a number of ways. First, it can discourage people from being active and spending time outdoors. Second, people with tick-borne illnesses can suffer debilitating symptoms if not treated promptly. Tick-borne illnesses are completely preventable and should not be a large concern if the correct prevention methods are used. Prevention methods include checking for ticks after being outside, and paying attention to summer sicknesses and symptoms. In communities where tick-borne illnesses are more prevalent, prevention is key to staying healthy and feeling safe.

*Nantucket's Current Status*

Nantucket has the heaviest burden of Lyme disease in Massachusetts. In addition to Lyme, Nantucket also faces higher rates of Babesiosis and Human Granulocytic Anaplasmosis, both tick-borne illnesses. A relatively new tick borne illness, Human Powassan (POW) virus has been discovered more frequently on Cape Cod since 2015. Human Powassan virus is potentially deadly, and luckily, there have been no cases of it on Nantucket as of July 2017.

Tick Bourne Diseases	Nantucket	Massachusetts
2013 Lyme Disease Incidence Rate	570	86
2014 Babesiosis Incidence Rate	353.9	7.9
2014 Human Granulocytic Anaplasmosis Incidence Rate	88.5	9.2

Source: Nantucket Cottage Hospital

### *Available Resources*

Nantucket Cottage Hospital

Nantucket Health Department

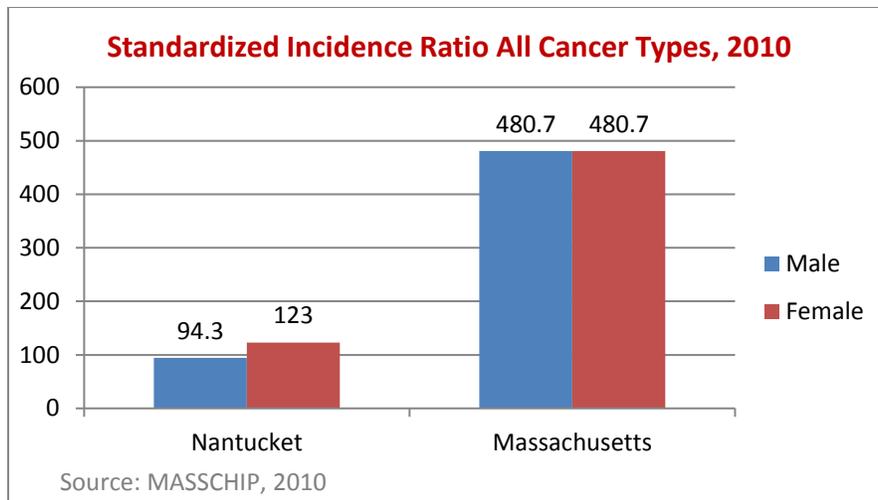
## **Priority 6: Cancers**

### *Why is this Important?*

There are many negative impacts on a society when there is a high incidence of cancer. There are emotional, social, and economic costs for cancer in a community. Although genetics has some role in a person's likelihood of developing cancer, many types are largely preventable. A low cancer rate in a community indicates a healthy environment with safe food and water, and active people. High rates of cancer may indicate an environmental carcinogen or general trend of poor health in a community. Low cancer rates save communities from suffering economic, emotional, and social costs of cancer.

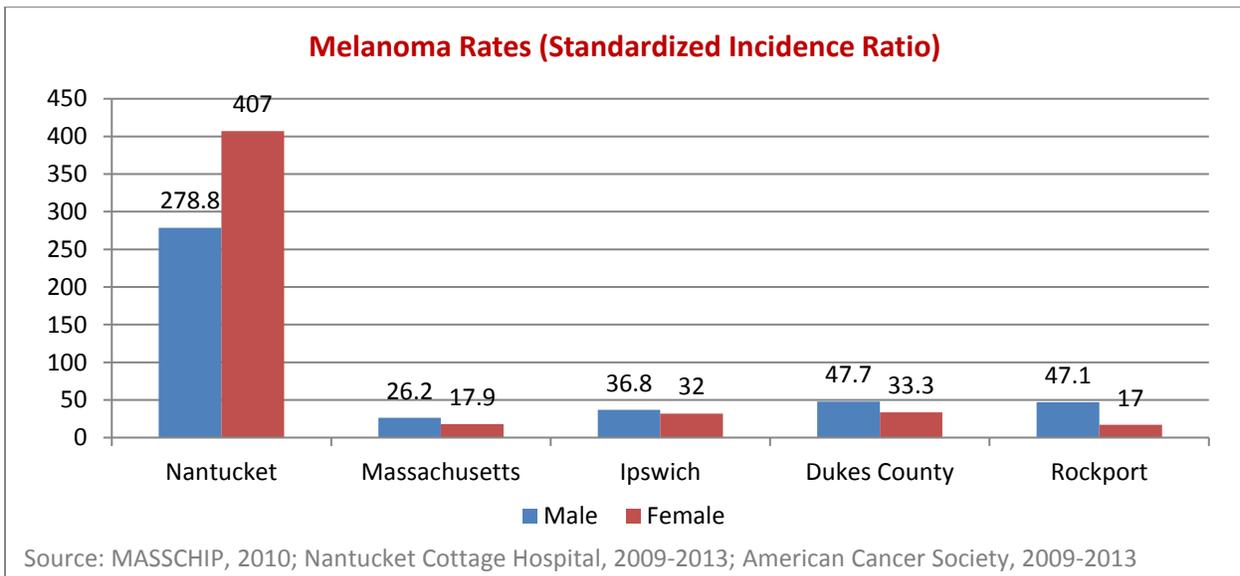
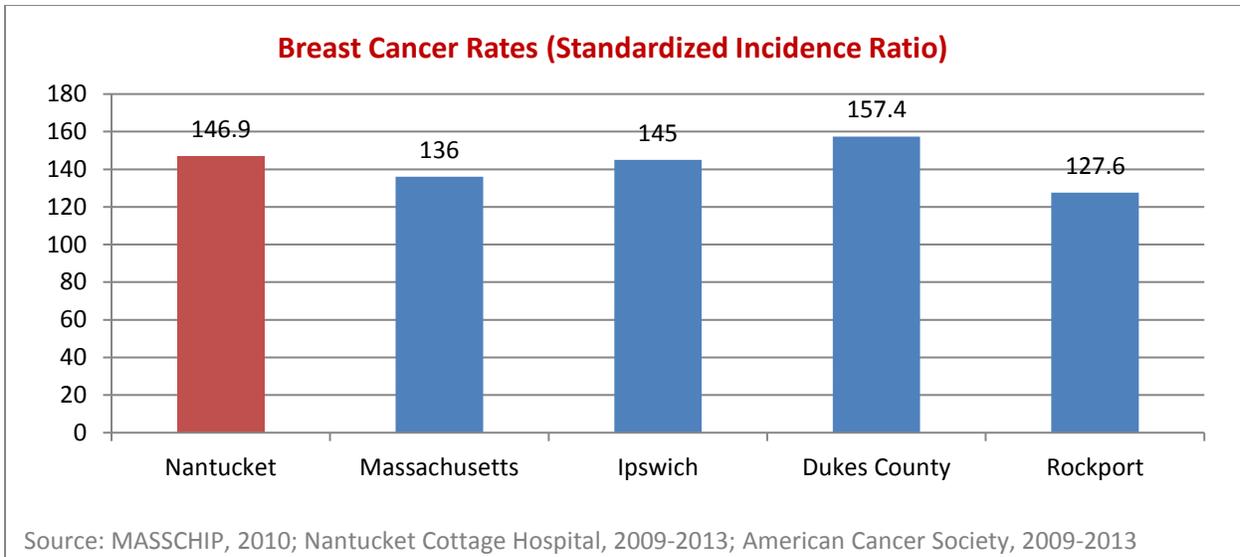
### *Nantucket's Current Status*

When compared with the state standardized incidence ratio for all types of cancer, Nantucket has a lower cancer incidence. At the state level, males and females have equal standardized incidence ratios (both 480.7). On Nantucket, males have a standardized incidence ratio of 94.3 while females have a standardized incidence ratio of 123. Although these statistics are both lower than the state level, it shows there is a slight health disparity among women in regards to cancer incidence.



The following two charts display standardized incidence ratios for breast cancer and melanoma (Skin Cancer). Breast cancer and melanoma were identified as areas of focus for Nantucket after Nantucket Cottage Hospital received the cancer data for 2009-2013. The breast cancer standardized incidence ratios for Nantucket, Ipswich, and Dukes County are all higher than the state level (146.9, 145, and 157.4 compared to 136). Rockport's standardized incidence ratio is lower than the state's at 127.6. Although Nantucket's standardized ratio isn't much different than the comparable data, it was chosen as a priority area because there was a statically significant excess in the number of breast cancer cases from 2009-2013 on Nantucket.

The American Cancer Society found that Nantucket has the fifth highest incidence rate of skin cancer in the country, with an observed case count of 25 in men and 17 in women between 2007 and 2011, a 373.1 standardized incidence ratio for men, and a 326.8 standardized incidence ratio for women; both of which are statistically significantly higher than the expected number. The chart displaying melanoma standardized incidence ratios shows a more severe picture than the breast cancer chart. Nantucket, Ipswich, Dukes County, and Marshfield are all above the state level for melanoma standardized incidence ratios. While the other comparable towns/counties are slightly above the state ratio, Nantucket has rates more than ten times as high. For males on Nantucket, the melanoma standardized incidence ratio is 278.8 and for females it is 407 compared to 26.2 for males at the state level and 17.9 for females. This is clearly an issue for Nantucket, but luckily, melanoma is completely preventable. Similarly to breast cancer, melanoma was chosen as a priority area because there was a statistically significant excess in the number of melanoma cases from 2009-2013 on Nantucket, as reported by the Nantucket Cottage Hospital.



*Available Resources*

Nantucket Cottage Hospital

Nantucket Health Department

## Implementation Strategies/Action Plans

### Improve the Efficiency of Local Government

- Control overlap and duplication of effort
- Scan files to create a completely electronic filing system
- Create a succession plan
- Increase staffing to meet the community demand

### Create Strategic Partnerships with Local Agencies

- Improve efforts to better public health by partnering with Fairwinds
- Leverage the Behavioral Health Taskforce to implement action items

### Prevent Future Suicide Contagions

- Create a central tracking center to collect data on crisis interventions, admissions, & Narcan/Naloxone use by NFD, NPD, Gosnold, Nantucket Cottage Hospital, & Fairwinds
- Target outreach to at-risk populations

### Advocate for Better Housing Opportunities

- Create a yearly housing report
- Work with the Affordable Housing Trust to increase housing opportunities

# Appendix

## Acronyms

**ASAP-** Alliance for Substance Abuse and Prevention

**CDC-** Centers for Disease Control & Prevention

**CHA-** Community Health Assessment

**CHIP-** Community Health Improvement Plan

**CHSA-** Community Health Status Assessment

**CTSA-** Community Tasks and Strengths Assessment

**CVD-** Cardio Vascular Disease (Heart Disease)

**FoC-** Forces of Change Assessment

**LPHSA-** Local Public Health System Assessment

**MAPP-** Mobilizing for Action through Planning and Partnerships

**MASSCHIP-** Massachusetts Community Health Improvement Plan

**MCL-** Maximum Contaminant Level

**NACCHO-** National Association of County and City Health Officials

**POW-** Human Powassan Virus (A Tick-borne Disease)

**STD-** Sexually Transmitted Disease

**STI-** Sexually Transmitted Infection

## Vocabulary

**Chronic-** describes an illness or medical condition that lasts over a long period, always present

**Communicable-** a communicable disease is one that is able to be passed from one person, animal, or organism to another

**Epidemic-** an outbreak of a disease that spreads more quickly and more extensively among a group of people than would normally be expected

**Melanoma**- a malignant tumor, most likely of the skin (Skin Cancer, loosely)

**Narcan**- a drug used by a trained professional on a patient who appears to have overdosed, reverses an overdose if used in time

**Naturalized Citizen**- a person who has granted citizenship in an adopted country

**Standardized Incidence Ratio**- an estimate of the occurrence of cancer in a population relative to what might be expected if the population had the same cancer experience as some larger comparison population designated as “normal” or average

**Statistically Significant**- statistically significant results are those that are interpreted to not occur by chance and therefore have other underlying causes for their occurrence

## CHA Survey Results

### Survey Responses

The responses to the following questions were categorized into the following categories. They are ranked based on the number of responses fitting within the category.

*What does a healthy community look like to you?*

<b>Answer:</b>	<b># of responses</b>
Access to medical care	11
A focus on a clean environment, water, air etc.	11
Opportunities to be active	10
Minimal use of drugs/alcohol	8
Good health overall: physical, spiritual, and emotional	7
People who care for and value one another despite differences	6
Safe	6
Affordable cost of living	5
Access to healthy food	5
Arts and cultural opportunities	5
Good Elder care	2

Good public education	2
Good family life	1
Progressive policies	1
Diversity	1

*What makes Nantucket healthy?*

<b>Answer:</b>	<b># of responses</b>
Focus on environmental health	15
Opportunities to be active	9
It's not healthy	5
Wellness focused community	3
Access to healthy foods	3
Access to care	3
Community involvement	3
Good public education	1
Hardworking people	1
Cultural opportunities	1

*Is there anything that stops you/your family from being healthy and/or making healthy choices?*

<b>Answer:</b>	<b># of responses</b>
Money	11
No	6
Lack of health care services	6
Lack of mental health care services	6
Limited activities that are not in bars	3
Lack of housing stability	2
Tick-borne illnesses	1
Water quality	1

Roads are unsafe	1
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*Do you have a primary care provider?*

<b>Answer:</b>	<b># of responses</b>
Yes	37
No	2

*Have any of these issues ever made it difficult for you to get health care?*

<b>Answer:</b>	<b># of responses</b>
Lack of evening + weekend hours	17
Long waits for care	14
Cost of care	10
I have never experienced difficulty accessing care	9
No provider near me	8
Insurance issues	7
Information not kept confidential	7
Lack of transportation	6
Don't know what services are available	4
Discrimination	2
No regular source of health care	1
Language barrier	0
Afraid to have a check-up	0

*What village do you live in?*

<b>Answer:</b>	<b># of responses</b>
Surfside	12

Miacomet	8
Town	8
Mid-Island	7
Madaket	3
Pocomo	1
Siasconset	0
Tom Nevers	0
Cisco	0
Dionis	0
Shawkemo	0

*Describe your residency status.*

<b>Answer:</b>	<b># of responses</b>
Year-round resident	14
Shoulder resident	0
Seasonal resident	0

*How often do you do the following?*

	Never	Once in a while	Sometimes	Regularly	Always
Get routine dental screenings	0	4	6	18	11
Get routine blood pressure screenings	2	4	7	11	15
Wear a seatbelt when in a car	1	3	4	7	24
Get an annual flu shot	15	1	7	6	10

Get routine eye exams	4	10	9	4	13
Wear a helmet when riding a bike	8	1	4	11	14
Get other routine vaccines (measles, diphtheria, etc.)	7	1	6	8	16
Eat at least 5 servings of fruits and vegetables each day	2	8	12	11	5
Get routine cancer screenings if your doctor recommends them (prostate exam, colonoscopy, mammogram, etc)	2	2	9	8	17
Exercise 30+ minutes per day	1	5	14	15	4

	Not at All	Neither agree nor disagree	Very much so
Are you satisfied with the quality of life in your community?	5	10	24
Are you satisfied with the health care system?	14	15	10
Is this community a good place to raise children?	7	10	21
Is this community a good place to grow old?	8	14	15
Is there economic opportunity in the community?	3	12	24
Is the community a safe place to live?	4	12	23
Are there networks of support for individuals and families during times of stress and need?	8	16	15
Is there an active sense of civic responsibility and	6	14	19

engagement and/or civic pride in shared accomplishments?			
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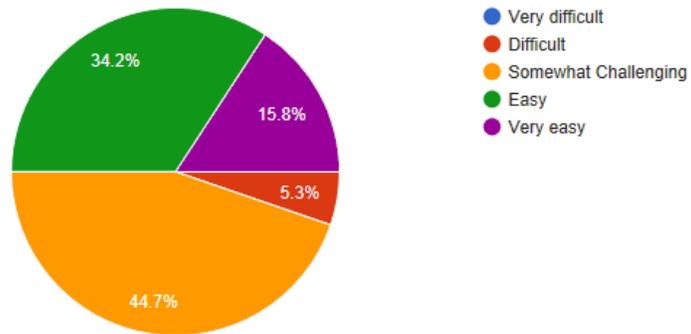
*How often do you do the following?*

	Never	Once in a while	Sometimes	Regularly	Very Often
Smoke cigarettes/cigars or use e-cigarettes	34	1	1	1	2
Drink excessively (more than 4 drinks in a night for women, more than 5 for men)	31	6	2	0	0
Use recreational drugs	34	3	1	1	0
Use prescription medications that were not prescribed to you by a doctor or nurse	36	2	0	0	0
Use smokeless tobacco products (dip, chew, etc.)	37	0	0	1	1

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### How easy is it to cope with day-to-day challenges for you?

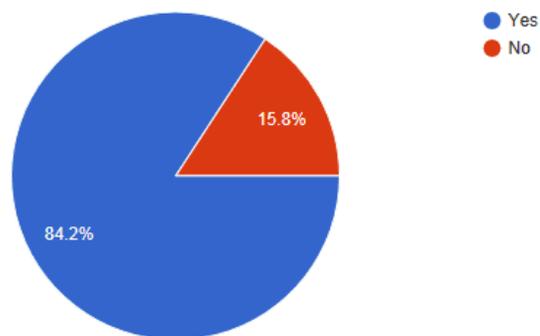
38 responses



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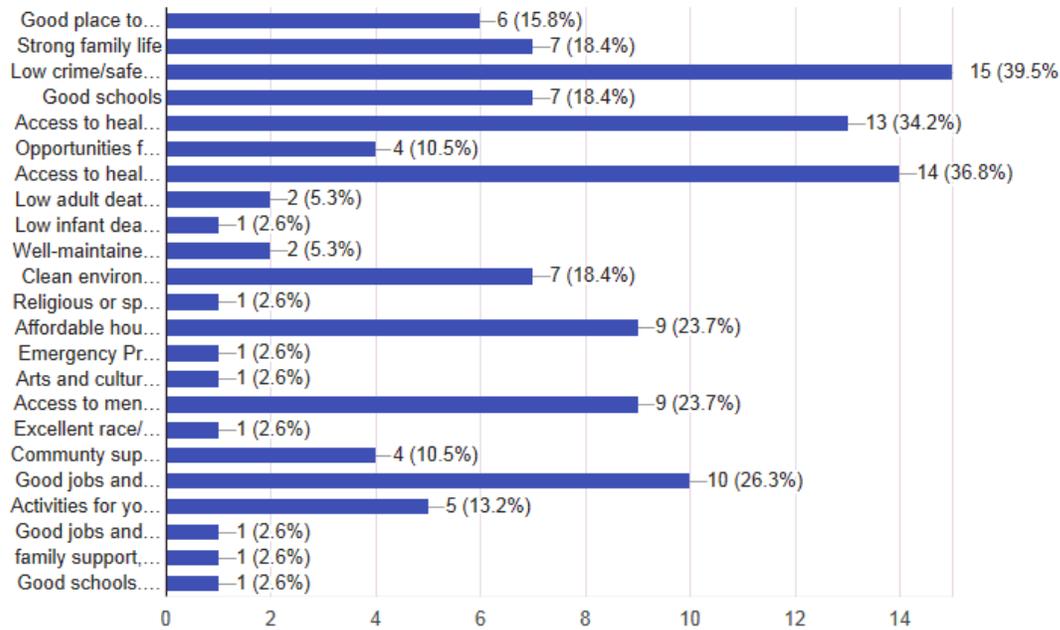
### Do you have a person that you can talk to about your challenges and stresses?

38 responses



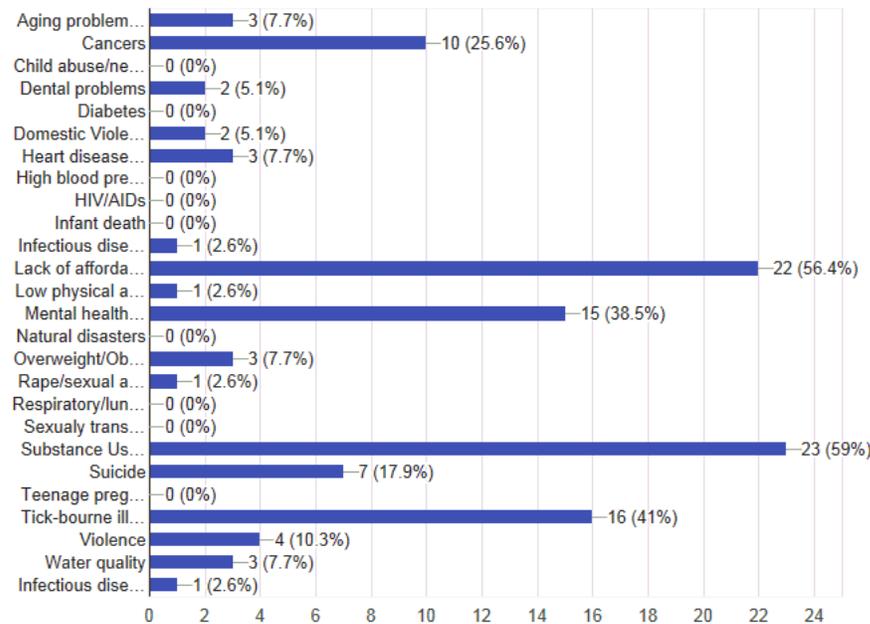
### What are the three greatest indicators of a healthy community? Please check only three.

38 responses



### What are the three issues that most impact overall community health on Nantucket? Please check only three.

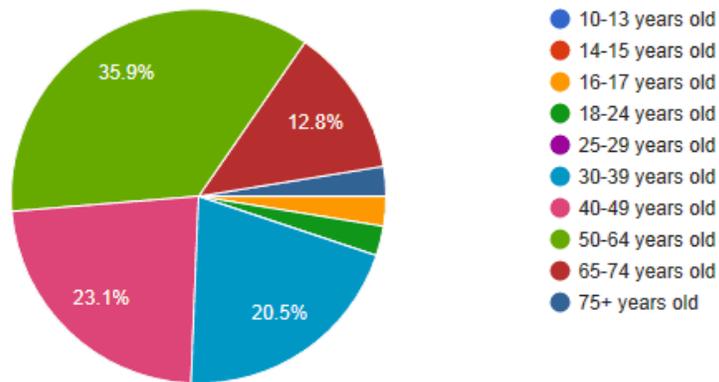
39 responses



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## What is your age?

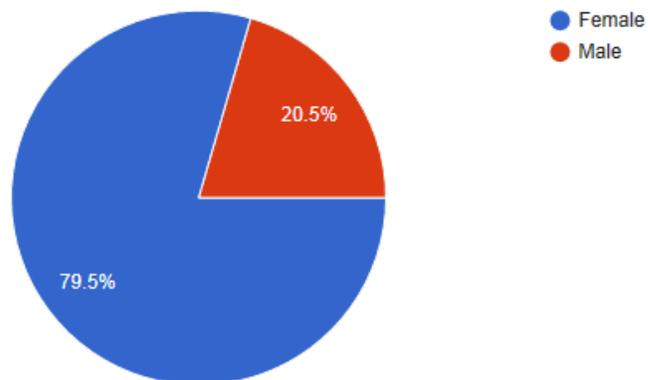
39 responses



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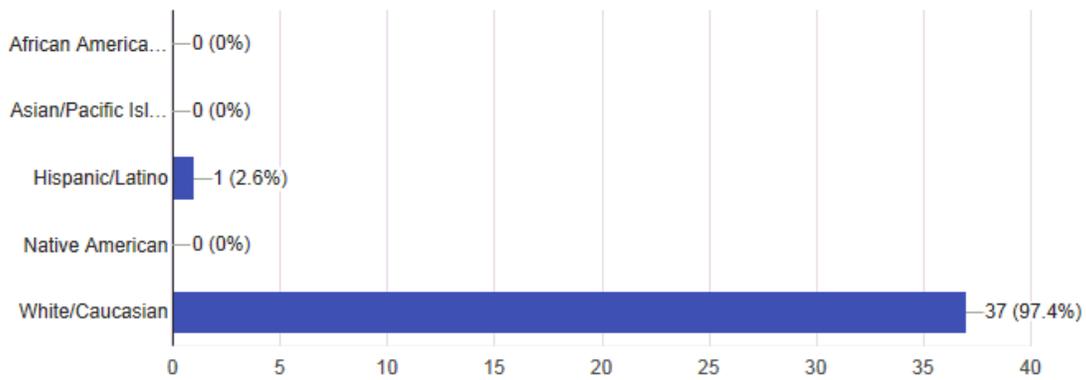
## What is your gender?

39 responses



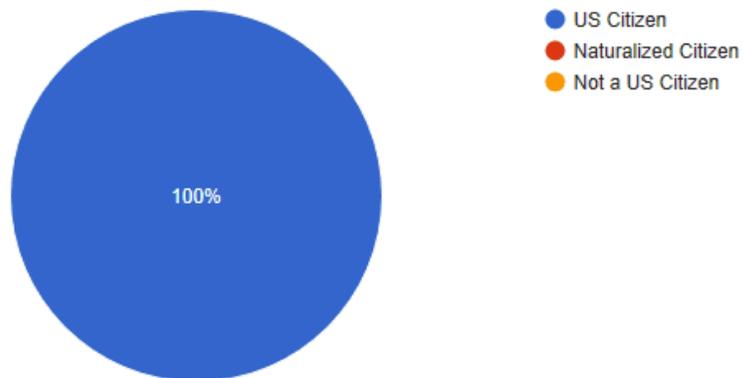
## What ethnic group do you most identify with?

38 responses



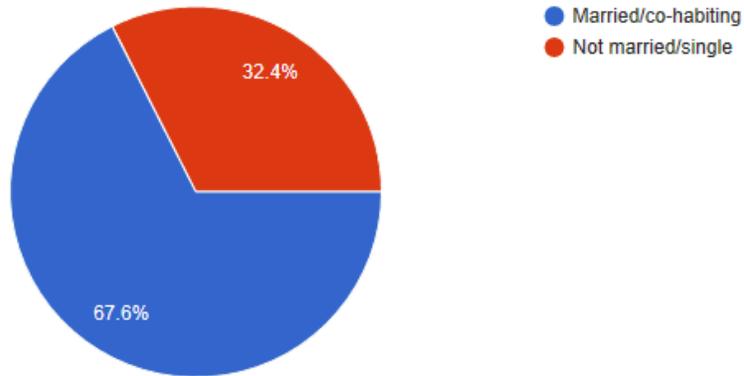
## How would you best describe your citizenship status?

38 responses



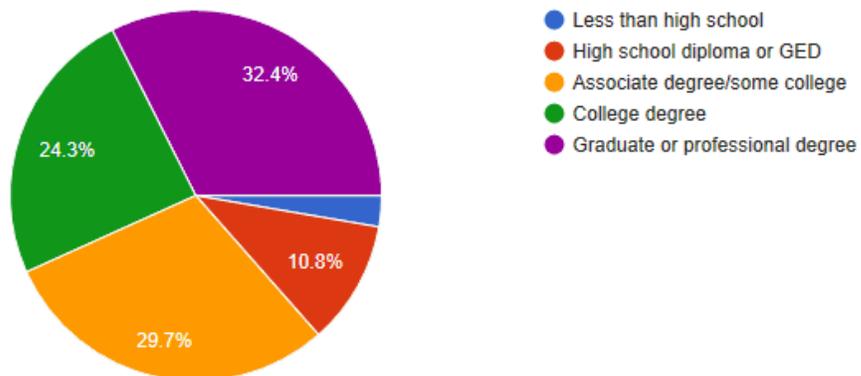
## What is your marital status?

37 responses



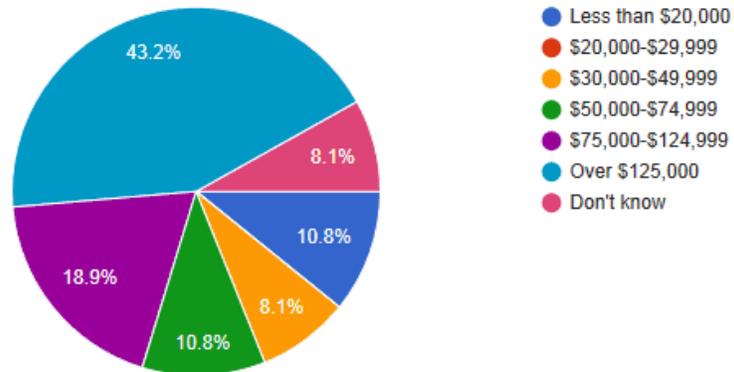
## What is the highest level of education you have completed?

37 responses



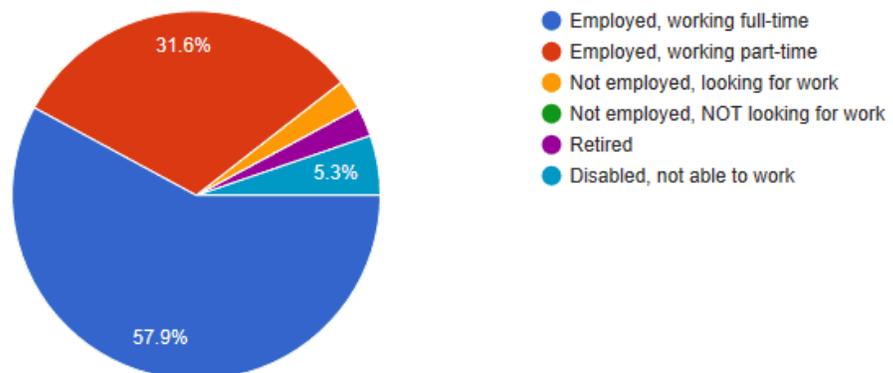
## What is your household income?

37 responses



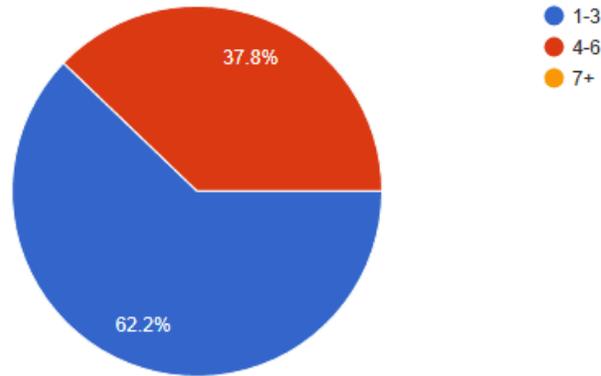
## Which of the following categories best describes your employment status?

38 responses



## How many people live in your household? (including you)

37 responses



## CHA Survey (English Version)

### 2017 Nantucket Community Health Assessment Survey

This survey is voluntary and completely anonymous. No answers will be linked to individuals and we will not contact you to discuss your responses. The survey should take approximately 20 minutes to complete. We appreciate your feedback and thank you for helping us to work toward bettering the health of our Nantucket community!

1. **What does a healthy community look like to you?**

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2. **What makes Nantucket healthy?**

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3. **Is there anything that stops you/your family from being healthy and/or making healthy choices?**

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4. **How would you rate the overall health of Nantucket?**

*Mark only one oval.*

- Very Unhealthy
- Unhealthy
- Somewhat Healthy
- Healthy
- Very Healthy

5. **Please respond to the following questions using the scale provided.**

*Mark only one oval per row.*

	Not at all	Neither agree nor disagree	Very much so
Are you satisfied with the quality of life in your community?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are you satisfied with the health care system?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is this community a good place to raise children?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is this community a good place to grow old?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is there economic opportunity in the community?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is the community a safe place to live?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are there networks of support for individuals and families during times of stress and need?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is there an active sense of civic responsibility and engagement and/or civic pride in shared accomplishments?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. **Please select yes or no for each of the following.**

*Mark only one oval per row.*

	Yes	No
Have you ever witnessed violence or domestic violence incidents in your community?	<input type="radio"/>	<input type="radio"/>
Have you ever been a victim of violence or domestic violence?	<input type="radio"/>	<input type="radio"/>
Do you feel safe in your community?	<input type="radio"/>	<input type="radio"/>
Do you feel safe at home?	<input type="radio"/>	<input type="radio"/>

7. **How easy is it to cope with day-to-day challenges for you?**

*Mark only one oval.*

- Very difficult
- Difficult
- Somewhat Challenging
- Easy
- Very easy

8. **Do you have a person that you can talk to about your challenges and stresses?**

*Mark only one oval.*

- Yes
- No

9. **Have you ever felt discriminated against because of your:**

*Mark only one oval per row.*

	Yes	No
skin color, race, ethnicity	<input type="radio"/>	<input type="radio"/>
sexual orientation	<input type="radio"/>	<input type="radio"/>
age	<input type="radio"/>	<input type="radio"/>
cultural background	<input type="radio"/>	<input type="radio"/>
income	<input type="radio"/>	<input type="radio"/>
gender identification	<input type="radio"/>	<input type="radio"/>

10. **How often do you do the following:**

*Mark only one oval per row.*

	Never	Once in a while	Sometimes	Regularly	Always
Get routine dental screenings	<input type="radio"/>				
Get an annual flu shot	<input type="radio"/>				
Get other routine vaccines (measles, diphtheria, etc.)	<input type="radio"/>				
Get routine cancer screenings if your doctor recommends them (prostate exam, colonoscopy, mammogram, etc.)	<input type="radio"/>				
Get routine blood pressure screenings	<input type="radio"/>				
Get routine eye exams	<input type="radio"/>				
Eat at least 5 servings of fruits and vegetables each day	<input type="radio"/>				
Exercise 30+ minutes per day	<input type="radio"/>				
Wear a seatbelt when in a car	<input type="radio"/>				
Wear a helmet when riding a bike	<input type="radio"/>				

11.

**What are the three greatest indicators of a healthy community? Please check only three.**

*Check all that apply.*

- Good place to raise children
- Strong family life
- Low crime/safe neighborhoods
- Good schools
- Access to healthy foods
- Opportunities for physical activity
- Access to health care (family doctor, dentist)
- Low adult death and disease rates
- Low infant deaths
- Well-maintained parks/ bike paths
- Clean environment
- Religious or spiritual values
- Affordable housing
- Emergency Preparedness
- Arts and cultural events
- Access to mental health care
- Excellent race/ethnic relations
- Community support groups
- Good jobs and a healthy economy
- Activities for youth (sports, arts, after school clubs, etc.)
- Other: \_\_\_\_\_

12.

**What are the three issues that most impact overall community health on Nantucket? Please check only three.**

*Check all that apply.*

- Aging problems (arthritis, hearing/vision loss)
- Cancers
- Child abuse/neglect
- Dental problems
- Diabetes
- Domestic Violence
- Heart disease and stroke
- High blood pressure
- HIV/AIDs
- Infant death
- Infectious disease (TB, hepatitis, etc.)
- Lack of affordable housing
- Low physical activity
- Mental health problems
- Natural disasters
- Overweight/Obesity
- Rape/sexual assault
- Respiratory/lung diseases
- Sexually transmitted infections (STIs)
- Substance Use/Abuse
- Suicide
- Teenage pregnancy
- Tick-borne illnesses
- Violence
- Water quality

13.

**How often do you do the following:**

*Mark only one oval per row.*

	Never	Once in a while	Sometimes	Regularly	Very often
Smoke cigarettes/cigars or use e-cigarettes	<input type="radio"/>				
Drink excessively (more than 4 drinks in a night for women, more than 5 for men)	<input type="radio"/>				
Use recreational drugs	<input type="radio"/>				
Use prescription medications that were not perscribed to you by a doctor or nurse	<input type="radio"/>				
Use smokeless tobacco products (dip, chew, etc.)	<input type="radio"/>				

14.

**Do you have a primary care provider?**

*Check all that apply.*

- Yes
- No
- Other: \_\_\_\_\_

15.

**Have any of these issues ever made it more difficult for you to get the heath care that you needed? (Check all that apply)**

*Check all that apply.*

- Lack of transportation
- Having no regular source of health care
- Cost of care
- Lack of evening and weekend hours
- Insurance problems/lack of coverage
- Language problems/could not communicate with provider or office staff
- Discrimination/unfriendliness of provider or office staff
- Afraid to have health check-up
- Don't know what type of services are available
- No available provider near me
- Long waits for appointments
- Health care information is not kept confidential
- I have never experienced any difficulties getting care
- Other: \_\_\_\_\_

16.

**Please think about the availability of health and social services in your community. How happy or unhappy are you with the availability of the following services?**

*Mark only one oval per row.*

	Not satisfied at all	Somewhat happy	Very happy
Overall health or medical services on the island	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health or medical services specifically for seniors (65+)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health or medical services specifically for youth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alcohol or drug treatment services for adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alcohol or drug treatment services specifically for youth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling or mental health services for adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling or mental health services for youth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transportation to island health services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reproductive health services for youth (birth control, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dental services on the island	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programs or services to help people quit smoking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health or medical providers who accept your insurance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medical specialists on the island	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interpreter services during medical visits and when receiving health information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social services (WIC, SNAP offices, emergency housing, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to specialist medical services such as lab testing, X-ray, MRI, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to affordable care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to affordable housing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to health foods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. **Considering limitations of financial and organizational resources, please rate how much attention you think the following conditions should receive.**

*Mark only one oval per row.*

	Less attention	No change	More attention
Access to care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Addictive/Substance abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Air quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asthma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Depression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diabetes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emergency preparedness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health equity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Healthy aging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart disease/stroke	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Infectious disease	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Injury prevention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motor vehicle/pedestrian injury	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nutrition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overweight/obesity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sexual health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suicide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teen pregnancy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tobacco cessation & prevention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Violence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. **What village do you live in?**

*Mark only one oval.*

- Siasconset
- Madaket
- Tom Nevers
- Shawkemo
- Cisco
- Town
- Pocomo
- Surfside
- Dionis
- Other: \_\_\_\_\_

19.

**What is your age?**

*Mark only one oval.*

- 10-13 years old
- 14-15 years old
- 16-17 years old
- 18-24 years old
- 25-29 years old
- 30-39 years old
- 40-49 years old
- 50-64 years old
- 65-74 years old
- 75+ years old

20.

**What is your gender?**

*Mark only one oval.*

- Female
- Male
- Other: \_\_\_\_\_

21.

**What ethnic group do you most identify with?**

*Check all that apply.*

- African American/Black
- Asian/Pacific Islander
- Hispanic/Latino
- Native American
- White/Caucasian
- Other: \_\_\_\_\_

22.

**How would you best describe your citizenship status?**

*Mark only one oval.*

- US Citizen
- Naturalized Citizen
- Not a US Citizen

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

*Mark only one oval.*

- Married/co-habiting
- Not married/single

24. **What is the highest level of education you have completed?**

*Mark only one oval.*

- Less than high school
- High school diploma or GED
- Associate degree/some college
- College degree
- Graduate or professional degree
- Other: \_\_\_\_\_

25. **What is your household income?**

*Mark only one oval.*

- Less than \$20,000
- \$20,000-\$29,999
- \$30,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$124,999
- Over \$125,000
- Don't know

26. **Which of the following categories best describes your employment status?**

*Mark only one oval.*

- Employed, working full-time
- Employed, working part-time
- Not employed, looking for work
- Not employed, NOT looking for work
- Retired
- Disabled, not able to work

27. **How many people live in your household? (including you)**

*Mark only one oval.*

- 1-3
- 4-6
- 7+

