

OUTER CAPE PUBLIC HEALTH NEEDS ASSESSMENT

NOVEMBER 2022

Town of Wellfleet Health and Conservation Department
Barnstable County Department of Health and Environment



Report completed February 2023 by Patrice Barrett, MPH of Barnstable County Department of Health and Environment

EXECUTIVE SUMMARY

The purpose of this assessment was to investigate and identify public health needs in the towns of Wellfleet, Truro, and Provincetown, Massachusetts. This would support dialogue about such needs and possible future interventions involving town personnel, community stakeholders and agencies, and citizens. Some needs identified were:

- Affordable Housing
- Increased Access to Healthcare Services
Public Health Wellness and Prevention Education
- Aging Population in need of support
- Mental Health Service Needs
- Substance Abuse Issues
- Food Security

The towns' public health departments will continue to provide direct services to residents and fashion larger roles in cooperative initiatives with community partners. The overall goal is to improve the quality of life for residents of the three towns. It should be noted this report was prepared during the COVID-19 era, and that has affected many aspects of life on the Outer Cape. Future evaluations may compare those results to now.

It is noted the data in this report was derived from a study involving all three Outer Cape towns' population. There is no way to identify individual town population responses.

*The results of this study were presented to the Town of Wellfleet Board of Public Health at a public meeting on December 14, 2022.

INTRODUCTION

The Massachusetts towns of Wellfleet, Truro (Truro and North Truro), and Provincetown are located at the northern tip of Cape Cod, an area referred to as the Outer Cape, as shown in Figure 1. Each of the towns has a slightly different character but share some similarities. The Cape Cod National Seashore's protected lands of sandy beaches, dunes, ponds, and marshes occupy more than fifty percent of the land mass in each town. The largest swath is in Provincetown, where 73% of the land falls in this category. All three towns are known for their beautiful shorelines and beaches and are bordered by the Atlantic Ocean on the east and Cape Cod Bay on the west.



Figure 1: Depiction of Outer Cape geographic area with towns of Wellfleet, Truro, and Provincetown

Current year-round population is 3566 in Wellfleet on the 2020 US Census.¹ The Wellfleet community gained 29.7% in population from 2010 to 2020. This was a trend in all of Barnstable County, though gains in other county towns were only in single digits. This reversed a trend from 2000 to 2010, when Wellfleet remained flat in population.² (Table 1) These numbers do not reflect increases in population during the COVID 19 pandemic, when property owners moved to their homes on the Cape for longer than just summer.

Table 1: Population in the Outer Cape towns for 2010 and 2020 with changes from 2000 to 2020

Town	Provincetown	Truro	Wellfleet
2010 Census	2942	2002	2750
2020 Census	3664	2454	3566
Change 2010 - 2020	+24.5%	+22.5%	+29.7%
Change 2000 to 2010	-14.3%	-4%	0 growth

All three Outer Cape communities see large surges in visitors and populations in the summer months. Wellfleet is known for its oysters and has an estimated six-fold summer population increase. The towns are classified as rural by the United States Census because of their low

¹ US Census Bureau, 2020

² Wikipedia – Provincetown, Truro, Wellfleet, 2022

population density.³ Seasonal Summer and early Fall tourism is the largest industry in the area. The beaches are naturally beautiful and welcoming, but also very bleak, windy, and cold in winter, creating feelings of isolation and loneliness for permanent residents at colder times of the year.

PROJECT BACKGROUND

A working group was formed in March 2022 comprised of four health agents from the Outer Cape towns of Provincetown, Truro, and Wellfleet, and a staff member from the Barnstable County Department of Health and Environment. After discussion about what interdisciplinary work would jointly benefit the three towns, it was decided to conduct a public health needs assessment. Truro and Wellfleet could not remember conducting such an evaluation and Provincetown had a brief one completed in October 2015. The assessment would be a starting point to understanding public health needs for year-round residents. The staffs could determine how to use current resources to meet needs and seek new ones if needed.

It is a unique time in public health history, after more than two years of dealing with the effects of the COVID-19 pandemic. This “COVID era” in the United States had 97.8 million COVID cases and more than one million deaths throughout the country.⁴ The pandemic exposed flaws and healthcare inequities, and drained resources in both our medical and mental health care systems. There have also been widespread economic effects with supply chain issues for goods, and rising cost inflation, poverty, and unemployment rates.

In Wellfleet, there were 613 confirmed COVID cases in the Massachusetts Department of Public Health MAVEN database from March 1, 2020, through September 30, 2022, with 6 deaths.⁵ The number would be higher if COVID home test positive results were counted. The work group anticipated effects from the COVID lived experience would be expressed in the assessment by residents on Questions 42 and 43, when asked about the effects of the pandemic on their lives.

PUBLIC HEALTH AS A DISCIPLINE

Public health is a broad discipline and encompasses roles in research, inspection and regulatory functions, nursing, policy development, disease investigation, advocacy, education, and others. Medical practitioners largely treat ill or injured individuals, where public health tries to prevent illness or injury and promotes wellness by encouraging healthy behaviors and environments. The Centers for Disease Control defines public health as:

“...the science of protecting and improving the health of people and their communities. This work is achieved by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing, and responding to infectious diseases”

³ Mass.gov. Massachusetts Rural Definition

⁴ New York Times, COVID Dashboard, November 2021

⁵ Mass DPH, MAVEN database, 2021

The World Health Organization has the broadest definition of health: a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

The US Centers for Disease Control and Prevention use the Ten Essential Public Health Services to provide a framework to protect and promote the health of *all people in all communities*.

⁶ To achieve health equity for all, living conditions should eliminate systemic and structural barriers that result in health inequities.

10 Essential Public Health Services

1. Assess and monitor population health status, factors that influence health, and community needs and assets
2. Investigate, diagnose, and address health problems and hazards affecting the population
3. Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it
4. Strengthen, support, and mobilize communities and partnerships to improve health
5. Create, champion, and implement policies, plans, and laws that impact health
6. Utilize legal and regulatory actions designed to improve and protect the public's health
7. Assure an effective system that enables equitable access to the individual services and care needed to be healthy
8. Build and support a diverse and skilled public health workforce
9. Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement
10. Build and maintain a strong organizational infrastructure for public health

Conditions where people live, learn, work, and play affect health risks and outcomes, called *social determinants of health*, and extend beyond individual behaviors or choices⁷. One of these is housing, a very important issue on the Outer Cape. The social determinants are pictured in Figure 2.

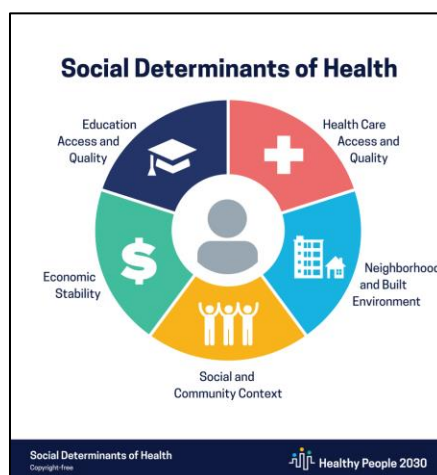


Figure 2: Illustration of the social determinants of health

⁶ Centers for Disease Control, 2020

⁷ United States Department of Health and Human Services. Health People 2030

PUBLIC HEALTH NEEDS ASSESSMENT

Needs assessments are conducted for many reasons in a variety of disciplines. It is a process involving several steps for determining "gaps," between current and desired outcomes.

*A community health needs assessment is **a systematic process that involves the community to identify and analyze community health needs and assets.***

It also involves prioritizing needs and laying the groundwork for action to address unmet health needs.⁸

This project examined the current health status of the Outer Cape population and their unmet needs. Input and information were gathered from town residents and community stakeholders/informants. Any identified need is seen as an opportunity for improvement, not a failure. A plan of implementation will be created at the end of the assessment to try and reduce and improve any large, identified needs.

The Robert Wood Johnson Foundation (RWJF), an internationally recognized public health research institute, contends that a community's overall health considers many variables: health behaviors (smoking, diet and exercise, alcohol and drug use, sexual activity), clinical care access and quality, social and economic factors (education, income, family and social supports, community safety) and the physical environment of air and water quality, housing, and transportation. Access to nutritious foods and the number of children living in poverty factor as well and should be considered through a lens of equity for all.⁹

Wellfleet is not large enough to be on RWJF's "How Healthy Is Your Community" rankings. Barnstable County is #9 out of the 14 Massachusetts counties in overall health outcomes. (Figure 3) Rank is calculated with two factors: Length of life = years of potential life lost before age 75 and Quality of life = self-reported and documented health status.

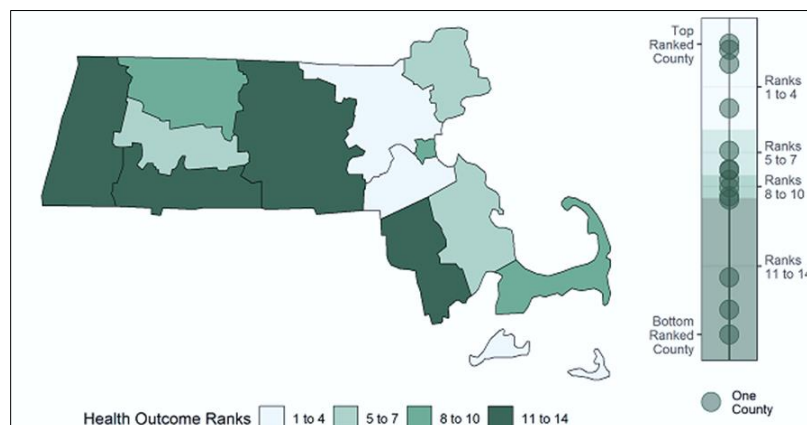


Figure 3: Robert Wood Johnson Foundation graphic of Massachusetts county health rankings

⁸ Centers for Disease Control, 2020

⁹ Robert Wood Johnson Foundation. 2022

This project had an additional goal: to determine if three Outer Cape health departments could work cooperatively together to analyze their public health issues and seek funding and solutions/services that could be shared by all three towns.

NEEDS ASSESSMENT PROCESS

In addition to the information/data gathering process using a survey, community stakeholders were interviewed that represented population categories in the realms of schools, health care, non-profit groups, town offices/services, or others with knowledge of community life. Publicly available data was also examined.

In all data collection, limitations must be acknowledged. This is especially true when examining small groups. Each source may have different data methods, and not be directly comparable to another in establishing the values. Attempts were made to find the latest values for relevant data. Key informant interviews were especially valuable to provide recent information on an issue.

The assessment process steps include:¹⁰

1. Research community history. Examine relevant demographic, health, and socioeconomic data. Make useful comparisons with other entities, ex. state, United States, communities of same size or characteristics.
2. Decide the population health characteristics to measure. (Disease, socioeconomic factors, Healthy People objectives)
3. Determine how to collect resident data. Online surveys are often used. Decide how to disseminate the surveys.
4. Compile and analyze data from the surveys. 20% is theoretically the minimum number of responses to give an accurate population sample. Not always possible in small groups. Determine what are significant findings
5. Communicate findings to the community.
6. Create an intervention plan to attempt to improve the issues/needs. Enact the plans for a given amount of time to allow for success or failures.
7. Evaluate progress/failure of interventions in a year or so
8. Reflect on both assessment process and intervention measures
9. Start process over/make corrections to interventions. Public health needs assessments are often every 3 to 5 years.

ASSESSMENT SURVEY

A copy of the resident survey is in the Appendix of this report. Care was taken to use simple language for the 46 questions, to allow for maximum resident literacy. No alternative language

¹⁰ CDC.gov. Centers for Disease Control

version was created, as populations were over 95% English speaking as first language.¹¹ Questions were asked age, sex, marital status, presence of children, approximate income. Other questions were drawn from the US Department of Health and Human Services' Healthy People 2030 Leading Health Indicators. These are standard social, health, economic, and behavioral measurements and goals used by communities throughout the United States.¹² Three questions were added at the end for unique information: biggest problem in ten years for the area, ranked effects of COVID on resident lives, and how residents learned about the survey.

Multiple methods were used to encourage year-round residents to complete the survey. Presentations were made to all three Outer Cape towns' boards of health about the project near the start of the initiative. The contact methods are shown in Figure 3: emergency alerts, library and Council on Aging newsletters, school backpack letters to parents, flyers with QR code, town department website postings, Facebook posts, media releases, and radio interview. 332 people specified "other" on this question, and the method remains unknown. Perhaps word of mouth. This information will be useful for future communication efforts.

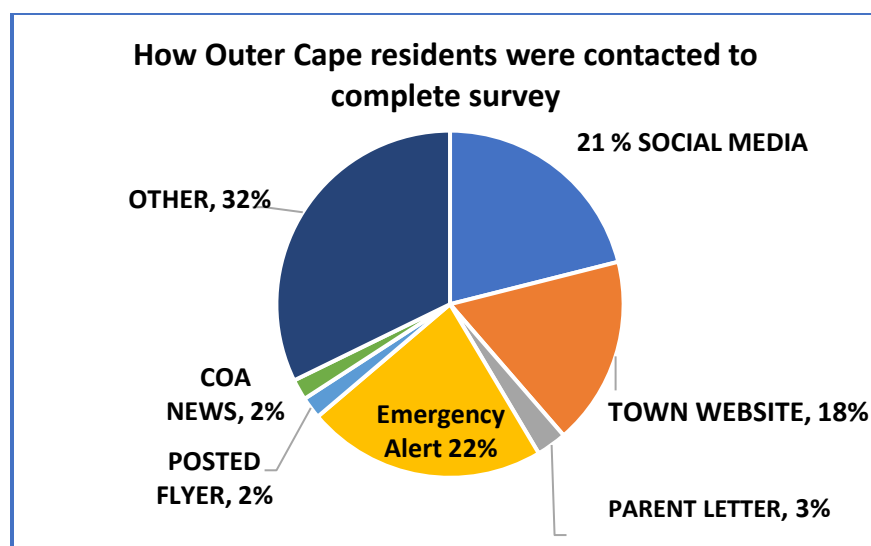


Figure 4: Percentage of methods used to contact Outer Cape residents to complete assessment survey

Surveys can be very convenient ways to gather information about a population quickly. But the process has its drawbacks with self-report response biases. This is considered with this survey because of the small number of people completing it. In response bias, people report a higher frequency or under report information, to be more socially accepted in their own minds.¹³

SURVEY RESULTS

1020 adults completed the survey in the three Outer Cape towns in an average time of eight minutes (Table 2). The survey was left open for two months, starting in early April to the first week

¹¹ US Census Bureau, 2020

¹² USHHS, Healthy People 2030. Leading Health Indicators and Social Determinants of Health.

¹³ Althubaiti, Alaa. 2016

of June before Summer seasonal visitors arrived. Table 2 lists the numbers and percentages of those who did the survey. Wellfleet had 279 residents take the survey, 8% of the population.

Through November 2022, stakeholders were interviewed from a variety of agencies, non-profit groups, and town departments. A list of stakeholders interviewed is in the appendix and some attended the working group weekly planning meetings.

Table 2: Percent of Wellfleet population completing assessment survey

N = 102	Wellfleet
2020 town population	3566
No. took survey	279
Percent took survey	8%

No town reached the desired 20 percent in responses recommended by researchers. Younger adults from 18 to 35 years old had a very low response rate at 3% of the 1020. A few theories were discussed about this finding in the work group. One was the young demographic's heavy dependence on social media other than Facebook or paper means for information.

DEMOGRAPHIC PORTRAIT OF OUTER CAPE

Tables 3 and 4 in the Appendix contain data from the United States Census on the population characteristics of the Outer Cape towns and survey respondents. This is compared to all of Barnstable County, the state of Massachusetts, and the United States to demonstrate where the three towns' residents compare socioeconomically and demographically with state and national populations.

Demographic highlights:

- *12 percent more males (56) than females (44) answered the survey. US communities usually have close to 50/50 population division of the sexes. The US Census does not yet include alternative categories for sex identification.*
- *Outer Cape towns are overwhelmingly White alone at 90% or more in ethnicity and race, like Barnstable County. Massachusetts (69.6%) and the US (75.8%) are more racially diverse.*
- *50 percent of those surveyed were between 55 and 70 years old, and 27% were over 70 years old. The Outer Cape median age and Barnstable County are higher at 56.5 years average compared to 40 years in Massachusetts and 38 years in the US. Any future public health work warrants larger outreach to younger adult town residents.*
- *59.6% on the survey were married, about 10% greater than Massachusetts and the US.*

- Some issues are more difficult for young families, like food security. Wellfleet households had the most children at 17.1%, but less than Massachusetts (30.6%) and US (32.8%). Future work should devote more attention to getting greater input from this family demographic.

SOCIOECONOMIC PORTRAIT

- The financial portrait of the Outer Cape residents is of relative security by national standards. Home ownership is very high at 85%, exceeding 75%, in Barnstable County and 20% higher than Massachusetts or the US. 90% lived in the same location last year. Home ownership is often seen as a large personal or family asset that confers financial and emotional stability. Close attention should be paid to the small population not having this same economic stability.
- Wellfleet had a poverty rate of 11.0%, very close to the US at 11.6%.
- 12.5% earned less than \$40,000, a true poverty marker in this environment. 32.6 % earned less than \$80,000 in the last year. Those under \$80,000 are defined as ALICE individuals: Asset Limited, Income Constrained, Employed.^{14 15}
\$80,000 is the maximum annual income allowed(2021) for affordable housing in the towns. Housing was the largest identified issue in this study and has been for at least 15 years.

Table 2a: Percent poverty rates in Wellfleet, Barnstable County, Massachusetts state, and US, 2021

	Wellfleet	County	Massachusetts	United States
Poverty rate as Percent population	11.0	7.7	9.8	11.6*

*16.9% poor are children under 18 in US and 10.3% are over 65 YO

- 50.3% of residents on the survey reported working full or part time, less than all of Barnstable County (59.3%), Massachusetts state (66%) and the US (60%). 44% identified as retired in the survey. It is difficult to determine accurate employment status in a community that depends largely on seasonal employment.
- The annual 2021 federal poverty level income is \$13,590 per individual in continental US. (Table 6) **Wellfleet has a total of 3566 residents in 2020¹⁶. With an 11% poverty rate, there are approximately 392 people, including children, living in poverty in the town.** The national poverty rate climbed from 12.1% in December 2021 to 17% in many areas in August 2022, largely because of rental, energy, and consumer good price inflation the past year.¹⁷ Wellfleet may now also have a higher poverty rate in 2022 but no recent data for this.

¹⁴ United Way, 2022

¹⁵ US Census, American Community Report. 2021

¹⁶ US Census 2020

¹⁷ HHS.gov

- The Outer Cape towns, Barnstable County, and Massachusetts all have higher rates of bachelor's degree completion by age 25 (46% in Mass. and Barnstable County 46.4%), than the whole US (32.9%). This is considered a marker of higher income potential and quality of life.

HEALTHCARE RELATED TOPICS

CHRONIC MEDICAL CONDITIONS

Outer Cape survey respondents indicated if they had several common chronic medical conditions. This would equate to a need for regular primary and perhaps specialty medical care and adequate access to those providers.

Figure 4 displays the results. The population in the survey had lower disease rates compared to the United States and Massachusetts, though close to the Massachusetts and US hypertension rate at 30.1%. (Figure 5)¹⁸

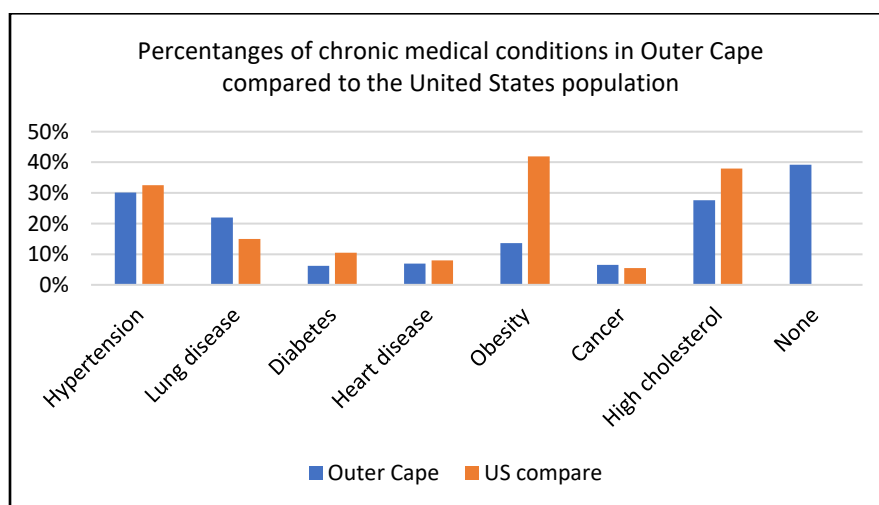


Figure 5: Percentages of chronic diseases in Outer Cape compared to US

Residents were not questioned about health insurance status. 97.3% of Massachusetts citizens had such coverage in 2021, including the Cape and Islands.¹⁹

- 966 of the 1020 respondents stated they had a regular healthcare provider
- 606/1020 or 59.4% usually sought care at Outer Cape Health Services, and 264 use a private medical practice. Despite these high numbers, **53.5% did not feel they had adequate access**

¹⁸ Centers for Disease Control. Adult disease prevalence rates 2020

¹⁹ Kaiser Family Foundation, 2022

* per capita income of a geographical location (country, state, city, or others) **measures the amount of money earned by every person in that area.** It determines the average income of a person in a country, a state, or a specific region.

to health care and many comments were made on Question 13 regarding this.(Table 7 in Appendix)

- A lack of adequate access to providers is an issue larger than the Outer Cape and a national problem. The journal *Medical Economics* reported in 2022 the US has the lowest access to primary care among the 11 wealthiest nations because of insufficient numbers of doctors being trained or going into primary care and pediatrics.²⁰
- Local school nurses stated students who are sick take more time off from class than expected to see a provider because of inability of parents to get appointments. They often need to go further down Cape to be seen and the child can lose up to 3 days off from school because of this if the illness is contagious or interferes with performance.

HEALTH MAINTENANCE MEASURES

- 81% got an annual flu shot, more than the US rate at 51.4%²¹ An older population would be more likely to receive this shot.
- 97% reported their routine vaccinations were up to date after provided with a link to the CDC recommended vaccine page. * This is contrary to lack of access to regular care but Barnstable county has a robust vaccine availability program.
- 90% of the responding residents can afford their medications.
- Regular dental care (one visit annually) was reported by 85% of the Outer Cape residents though many complained about a lack of dental care in the area. * This is higher than other rural areas at 77%
- 84% of Outer Cape residents reported being up to date on cancer screenings. Massachusetts has a high rate overall with 81.1% having a colonoscopy and 88% with mammography. It is difficult to distinguish if these tests are done at the prescribed intervals. The Healthy People 2030 goal for mammography is 77.1% annually ²²
- The cancer statistics from 2008 to 2015 for Outer Cape towns are the latest available on the web: a small data slice and not current. They show slight rises in colon, breast, prostate, and lung cancers based on the national expected rates.²³ Further understanding of this topic requires special investigating.
- 5% of residents do not know the recommended intervals for cancer screenings and many comments expressed a lack of knowledge about their importance or disinterest. Health education could play a role explaining their importance.

²⁰ Medical Economics, March 16, 2022

²¹ Health People 2030

²² Healthy People 2030

²³ Massachusetts Cancer Incidence City and Town Supplement, accessed 2022

“Procrastinating”
“not confident they are really necessary or just money makers”
“I just haven’t made a coloscopy appointment yet ” “Not sure”
“I am not worried about getting cancer”

- 88% of the residents knew their HIV status, another Health People 2030 goal, and 87% of US residents know it.

LIFESTYLE/DIETARY HABITS

- 70% self-reported 30 minutes of exercise five times a week, where 51% of US adults said they get this 3 times a week.
- Only 5% of Outer Cape adults in the assessment said their diet was high in concentrated sugars and 17% or 17% said somewhat high.
- 24 or 2.3 % adults in the survey reported a diet high in fats and 8% said somewhat high in fat.
- 55% of the survey residents reported eating the USDA recommended 5 or more servings of fruits and vegetables a day. This may be a point worthy of educational intervention in the three communities.

HOUSING

“Like water and food, having a safe, stable place to live is at the very core of basic human needs. Housing is an important determinant of health, and those who experience homelessness are at greater risk for health challenges. “ Housing Assistance of Cape Cod

A lack of affordable housing prohibits local medical facilities from hiring sufficient credentialed staff and leads to reduced levels of healthcare for residents. It is also difficult to find home healthcare and other support staff to care for an increasingly aging population, tradespeople to repair buildings, and service staff in establishments. There is a very limited number of people to apply for almost any vacant position in the local workforce and prevents bringing workers to the area with new knowledge, expertise, skills, and cultural experiences. Most important, the median age of the residents will continue to rise with no youthful additions to sustain the area population.

“Lack of truly affordable housing for year-round residents. There is a huge divide between the “haves and have-nots” which leads to animosity between groups”

- Estimated median home value in Provincetown increased in October 2022 to exceed \$1 million.²⁴

²⁴ Data USA, updated 2022

- Wellfleet has 39 units planned for affordable housing in several years and Provincetown has 65 more units and possible seasonal worker housing planned.²⁵ A homeless prevention worker said the waiting lists for current affordable housing units are years long. At any one time, she knows of 7 to 22 individuals living without proper shelter of any kind.²⁶ It is not a problem that occurs “somewhere else but locally” and needs attention.
- Housing Assistance of Cape Cod states there is a waiting list of 200 for shelter. 90% are elderly or disabled.²⁷

ACCESS TO HEALTHY FOODS

**Depends on if we can afford it.” “Produce is expensive”
“Cannot afford on Social Security checks”**

“Currently they are part of our food cart but as prices rise, things will start changing”

“I’ve never seen anything like it. It’s not just that there are more clients. People are coming more often and putting more in their bags.” – food pantry manager

- 7% of overall survey respondents do not have access to healthy foods.
- 18% of Outer Cape residents did not have enough to eat in the past week. Comments were made about the poor quality of food available locally. (Table 11)
- No data was available for recent Outer Cape food pantry use. Some food insecurity is expected with over 900 people, including children, living in poverty in Wellfleet in 2022.²⁸ Food insecurity likely rose overall on the Outer Cape but there is no reliable contemporaneous way to access accurate data.
- Table 9 displays data for Outer Cape SNAP and other DSS program recipients from January 2021 (height of COVID 19 effects) to July 2022, when tourists returned to the Cape and jobs were again more available. There are only small variations (5 cases) in the Wellfleet numbers during the time span. This demonstrates a chronic low-income population of all ages that needs the food benefits.
- Women, Infants and Children enrollment and utilization was only at about 45% in 2018. No more recent data were available.²⁹

²⁵ Provincetown Independent

²⁶ Perry, Mackenzie, 2022

²⁷ Housing Assistance of Cape Cod, 2022

²⁸ American Health Rankings, 2022

²⁹ Mass. gov data for WIC use, 2018

- School lunch programs provide breakfast and lunch to students during the school year and help children receive healthy foods during the week.
- Farmers markets run about four months a year in the area, a very short time. The markets accept SNAP, WIC, and senior coupon benefits. No data were made available on how many people used the benefits at the markets.
- Small food pantries exist in multiple church and town locations run by a variety of organizations. Wellfleet has a once a week evening meal program in colder months for residents.³⁰
- The local paper reported in November 2022 people using the Outer Cape food pantries rose 64 percent during the recent year. Provincetown food pantry almost doubled use from September 2021 to 61 in September 2022. The busiest pantry in 2022 was in Wellfleet, but no specific numbers of those served were available.³¹
- The Feeding America CEO was interviewed on National Public Radio in November 2022 and reported there was a recent national spike in food pantry users, coupled with a decrease in donations. She encouraged more generosity from both individuals and businesses that can afford to donate to food pantries.³²

MENTAL HEALTH ISSUES

“Where would I even go ? “

“I can’t afford mental health care.

“ Getting a provider is very Difficult “

“No one here has easy access to mental health services”

- 135 comments were received for this question topic and reference was made to it on other questions. The issue was raised immediately in stakeholder dialogues, after housing. Comments included difficulty finding mental health professionals on the Outer Cape, cost of treatment, and not any improvement in these access to services issues over many years.

No accurate data for the Outer Cape was available on mental health diagnoses. The best way to get this data is through access to health records, a highly protected process due to privacy laws or it takes multiple steps through reimbursement programs.

- 20% of respondents stated they are currently being treated by a healthcare professional for a mental health diagnosis of any kind and 20% had a family member with such a diagnosis.

³⁰ Raff, A 2022

³¹ Benson, 2022

³² Wong, Wailin, 2022

- 40% of residents did not know where to find information if they needed mental health services.
- 23% knew someone who committed suicide in the last year.
- Professional counselors are available in the town community centers in Wellfleet and Provincetown, but unclear how much this service is used or known.
- COVID isolation worsened a baseline problem with mental health on the Outer Cape, with greater anxiety; and for some sparked or amplified serious mental health problems.³³
- The Centers for Disease Control and Prevention (CDC) reported suicide is the second leading cause of death for people age 10-14 and 25-34 in 2020, before the COVID 19 pandemic when community members became isolated from one another.
- Outer Cape Health Services (OCHS) provides mental health and counseling services, but do not have enough providers to meet demand. The OCHS Community Resource Navigators help for short term needs. Any inpatient services are located down Cape near Hyannis or further.

Barnstable County Department of Human Services has commissioned a report on child and adolescent mental health needs, due in early 2023.

- Mental Health America reports Mass. is ranked #3 (1 is best) for mental health issues – translating to less prevalence of mental health diagnoses and greater available access to care. This rank included data on substance use and reports of suicidal thoughts.³⁴

“Loss of learning in children both academic and social integration”. “More needs to be done for kids’ mental health”

SUBSTANCE ABUSE

- No specific area data on this issue were available despite multiple inquiries to stakeholders.
- 16 individuals or 15% of respondents admitted to binge drinking in the last month, from once to 8 or 9 events.
- 17% of residents reported using marijuana 1-5 times in the past month and another 17% more often. Only 6% or 61 people reported tobacco(cigarette) use.

³³ World Health Organization, 2022

³⁴ Mental Health America, 2022

- There has been a significant increase in opioid related overdoses on Cape Cod during COVID 19³⁵
- The Barnstable County Department of Human Services has commissioned a study on Cape Cod substance abuse. Hopefully this will better inform the situation. Last study was in 2014.
- Stakeholders acknowledge there is a persistent substance abuse problem on the Outer Cape with alcohol and other substances.
- Outer Cape Health Services does offer substance abuse services, but like other medical services there, it is overwhelmed and understaffed.

COVID -19 IMPACTS

“Increased anxiety and depression” “alcohol intake”

Lost the ability for decent social interactions”

“Lack of recreation and social activities”

“Part of isolation. Feeling trapped. Loss of spontaneity. Too dangerous to just do what you feel like doing”

“Lack of normalcy for young people with regard to school”

“Losing friends over mask issues”

The most anticipated answers came from Questions 42 and 43 about what residents felt was the greatest social or health impact in their lives to date from COVID 19. Residents ranked these impacts from 1 to 5 with 1 being the greatest and 5 the least. The ranking of the answers is shown in the graph below and in Table 10 in the Appendix.

- “Social loneliness and isolation” was the first choice for 56.5% and 2nd choice 22.5%, totaling 79%. Worsening mental health and depression was chosen 2nd and 3rd by 30.3% and 36.9% respectively equaling 67.2%.
- 12 people commented on the effects the pandemic had on children’s mental health with lost peer socializing and learning.

“Behavioral impact of stress – impatience, anger”

- The comments about social and health impacts from COVID 19 were notable for the length of the answers and how candid they were.

³⁵ Gosnold. org

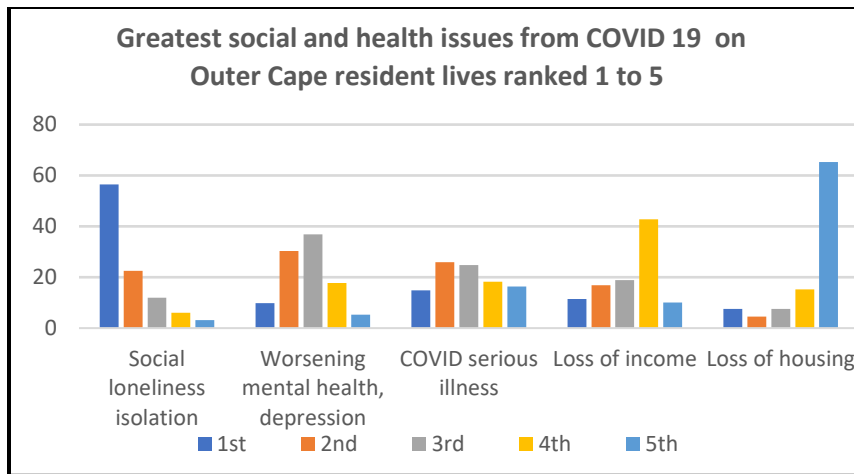


Figure 6: Graph of resident social and health issues from COVID 19 ranked 1 to 5

GREATEST OUTER CAPE ISSUES NEXT 10 YEARS

- The three greatest social, economic or health issues for the Outer Cape in the next 10 years elicited hundreds of responses. These were counted and sorted by topic category.
- Housing was overwhelmingly the most often mentioned, at 194 times. Access to health care and concerns about employment and income were second and third in frequency. The first two areas have already been discussed in this report.

IDENTIFIED PUBLIC HEALTH RELATED ISSUES

"HOUSING, HOUSING, HOUSING!!!!"

The severity of issues referred to was ranked using numerical data, stakeholder interviews, the number of times a topic was mentioned in the question about what is facing the Outer Cape in the next ten years, and information gathered from all sources. There were 51 pages of useful comments for all the survey questions.

1. AFFORDABLE HOUSING

"Housing not available for the seasonal workers. Housing costs are sky high."

This issue underpins almost every other aspect of life on the Outer Cape. Residents mentioned this more than 194 times as the greatest issue facing the Outer Cape in the next ten years, usually as first choice. Many stakeholders said it has been important for about 20 years and causes a variety of problems in their sector.

Public health staff cannot have a large impact on building affordable housing with planning, financing, issuing permits, or actual construction. They can advocate with vocal support for this great need and encourage all Outer Cape residents to offer vocal support.

2. LIVING AFFORDABILITY

This topic was mentioned 33 times as the greatest problems in the next ten years. This is not without merit and intersects with the other issues in this report.

- Table 11 shows the cost-of-living indices in the Outer Cape with 119.5 in Wellfleet. Comparison values are 117.3 for Barnstable County, and 100 for the entire United States(baseline comparison value). Mississippi, the poorest state, is 83.3.
- Plainly stated, Wellfleet is roughly 20 percent more expensive to live in than the average US community. The affordability is worse for the 900 people living in poverty who buy consumer goods required for daily life.

Table 11: Cost of living indices for Outer Cape towns, Massachusetts and US

	Wellfleet	Barnstable County	Massachusetts	United States	Mississippi
Cost of living index	119.5	117.3	127.5	100*	83.3

*100 is base value for comparison of all US

- In the United States, there has been inflation for all consumer, housing, and energy goods for the last eight months of 2022. In Wellfleet this is yet higher.
- Solutions to this inflation problem are federal government based. As stated earlier with the food issue, those at higher income levels could provide food pantry or fuel assistance donations to help less fortunate Outer Cape residents.

HEALTHCARE

“We very much appreciate the work Outer Cape does, but we are still missing reliable access to dental care, specialists and timely appointments.”

OCHS is overwhelmed. Too few doctors. Too little time. So patients easily fall between the cracks.

“not enough professionals to tend to people in need”

Residents commented on several aspects of healthcare on the Outer Cape. There is a lack of specialists in the area, and emergency facilities and sophisticated testing are far away. Survey data shows 53.3 % of the residents do not have regular access to any) PCP and chronic long wait time to see a provider.

As stated earlier, a lack of affordable housing prevents hiring enough providers for Outer Cape Health Services and affects home health care support.

Living in a rural area (the Outer Cape classification) inherently brings a lack of highly sophisticated health services. Seeking this care means long drives. Emergency care is far, reduced by using medical helicopters. This issue prompts difficult decisions about where to live if your severe medical condition requires prompt and highly intensive healthcare. Bringing more primary care practitioners to the area is a topic for discussion at higher levels of government with all stakeholders.

“...we are still missing reliable access to dental care, specialists and timely appointments.”

DENTAL CARE

A lack of Outer Cape dental care was mentioned many times in healthcare comments. The dental practice previously in Provincetown was operated by an independent entity and closed. It was no longer feasible to operate financially because of the low population in the area.³⁶ This problem requires a separate solution from that of primary care and different considerations.

NUTRITION EDUCATION

Nutrition and healthy food education helps to reduce or prevent chronic disease effects and teaches about healthy eating. This may also benefit those who are food insecure if they could learn to create healthy meals for less money.

“Given all the issues about osteoporosis, obesity, lack of vitamin D in winter, etc. it would be very useful to have a nutritionist at OCHS.”

MENTAL HEALTH

The need for better mental health services on the Outer Cape has already been mentioned in this work, with no easy solution in sight. It would require innovative efforts with a community coalition of professionals in the mental health discipline. The services were hard to get at baseline and COVID has increased rates of depression and anxiety.

All mental health issues are worsened, in cold weather like that on the Outer Cape when population is low and it is barren. People have reduced regular social interactions.

³⁶ Smith stakeholder, email correspondence, 11/2022

Some organizations were identified to help: Cape Cod And Island Suicide Prevention Council that trains volunteers and professionals to help people, National Alliance on Mental Illness(NAMI) of the Cape and Islands.

SUBSTANCE ABUSE

- The AIDS Support group of Cape Cod has 12 step recovery meetings in Provincetown and Truro. They also provide Narcan and syringes.
- This is a long existing problem on the Outer Cape and nationally. It does not have an easy solution.
- It will also require a determined coalition of professionals to bring better substance abuse services to the Outer Cape.
- Encourage professionals in this area to keep advocating for services closer than the Lower Cape.
- The US government opiate settlement with large Pharma companies has begun distributing compensation funds to every town. These can be used for substance abuse programming in the future.

AGING

"Baby boomers will soon be the Elder Boomers and we need better health care! How can we best navigate the massive age shift now underway? Pandemic drove demand to live full time on the Cape. I know a few people that sold their condos due to aging and no health care."

The statistics presented in this report show a high median age for the area compared to younger ages in Massachusetts as a whole and US. Those 55 and older are 50% or greater of the population in the Outer Cape towns, while only 30% in Massachusetts and 28% in the US.

Aging in place requires adequate support and clinical services with appropriate levels of personnel. The solution is multi-faceted, harkening back to the affordable housing issue to allow people in supportive professions to live in the area. Those that will age sooner should be great advocates for these changes. Their lives depend on it.

FOOD SECURITY

- President Biden recently stated at The White House Conference on Hunger and Nutrition ending hunger needs to be a national priority with increased healthy eating and physical activity, and reducing diet-related diseases. It has implications for overall public health and health equity.³⁷ Perhaps there will be a national initiative that will bring funding to the area to work on the issue.

³⁷ Mozarian. 2022. NEJM

- Food pantry volunteers said they rely on the Greater Boston Foodbank which had to cut back on what they supply. The shelves were very bare and only a few odd items at a Provincetown food pantry. The pantry serves many families in a week.
- Perhaps a community awakening can occur to encourage residents who are financially stable and do not need to use food pantries to organize collections of food goods and monetary donations. This can take place through notices with community partners like libraries, banks, businesses, and town government offices. Hunger will continue to exist for the ten percent or greater of the Outer Cape population.
- It may be possible to introduce a larger community gardening initiative and carry it through cold weather with education on plant growing conditions for individual gardeners or groups. This would supply fresh produce earlier and later than the farmer market season.

HEALTH DEPARTMENT ROLE

Outer Cape health department personnel now spend the majority of their working time performing tasks related to statutory public health requirements: food inspections, septic and wastewater issues, and conservation work. This is a very small slice of the role public health plays in communities with essential services.

Communication, health education, and outreach to residents as traditional public health roles could be improved. Younger residents were not reached in the survey outreach. Greater use of social media, and information displays at events or public areas would increase department visibility and communication.

Wellfleet has two health department personnel. This greater outreach goal will be very difficult to learn about, plan, and enact. Researching other small town health departments in Massachusetts would give ideas about citizen outreach and education. The possible outreach topics are many: blood lead testing for young children (which has been low recent years), health prevention measures, dietary and health maintenance issues are commonly communicated in the education roles.

The Wellfleet health department invested in making new and continuing relationships with other community partners, and can now take a leading role in coalitions.

EARLY IMPLEMENTATION PLANS

The health departments and community partners have already begun efforts to improve issues investigated and written about in this report.

Substance abuse

Acadia Health will have a treatment van in partnership with Outer Cape Health, at their pharmacy location in Wellfleet 6 to 7 days a week. This will be a big plus for substance abuse treatment and

individuals who will not need to go great distances for services and medication. The Wellfleet health department played a large role in this program.

Mental health

- The health departments and other community partners (Outer Cape Solutions and Provincetown Public Library) submitted a grant application to the Cape Cod Health Foundation in Fall 2022.
- The foundation awarded the group \$10,000 toward the operation of their annual Winter Wednesdays program that offers classes and activities for Outer Cape residents January through March. The program reduces feelings of loneliness and isolation in winter for residents with seeing people and learning new ideas. The funds are in addition to those already supplied by various government departments of Outer Cape towns and will increase the program size and offerings in Winter 2023. The application can be repeated in successive years for the funds.
- The town health departments in partnership with Outer Cape Solutions coalition and others submitted an application in Fall 2022 to Barnstable County for \$500,000 in American Rescue Plan funds. The letter was accepted, and the final application is due in December 2022. If given funds, it will create a program in all four Outer Cape towns (Eastham included) to monitor health maintenance measurements and assist with mental health care. The grant would fund one nurse, one Certified Nursing Assistant, and one Mental Health Clinician. The nurse, perhaps with nutrition support, can see residents for basic vital signs and health issues like blood pressure, diabetes, cholesterol checks, and overall health education. The mental health clinician would see residents referred by navigators or those in crisis. The application also includes funds for facilitation services for the town governments to work out space sharing in town facilities.
 - Flu vaccine clinics were held Fall 2022 in all three towns and will continue in future years. COVID vaccination clinics have also been held. Routine vaccinations are available through Barnstable County nursing services.
 - Barnstable County communications staff has been providing help to learn about and discuss messaging strategies to residents.

CONCLUSION

This report serves as a starting point for understanding and assessing the status of public health related needs and goals in Wellfleet and the surrounding area in late 2022. The issues were examined in a rare time in history, the COVID-19 era. Yet, many issues considered in these pages are longstanding ones. Hopefully, the Wellfleet health department is poised to take on larger roles in some issues by forming liaisons with other community partners and enlarging the scope of their performance goals

List of stakeholder informants interviewed

PROVINCETOWN	Name	Agency	Invite/Interview	
	Amy Raff	Provincetown Library	interview x 2	partner - Winter Wednesdays
	Gwynne Guzzeau	Helping Our Women	Interview 8-2022	visit planning meeting
	Anonymous volunteer	Ptown food pantry	Interview 11-2022	
	Donna Reardon	Ptown Soup Kitchen	Interview 11-2022	
	Mackenzie Perry	Community Support Liaison Homelessness	Interview 11-2022	Office in Ptown soup kitchen
WELLFLEET				
	Racine Oxtoby	Wellfleet Lib Outreach	Interview 7-2022	
	Suzanne Thomas	Community Services & aging	Interview x 2	
	Claudia Cope	School nurse Wellfleet	Interview x 2	
	Janet Drohan	246 Kitchen	Interview 8-2022	Email dialogue also
	Tricia Ford	Truro library	Interview x 2	
	Volunteer staff	Truro Community Kitchen	Interview 11-2022	
	Thomas Roda	Truro Police Dept	Interview 11-2022	
CAPE BASED	Name	Agency	Invite/Interview	
	Francie Randolph	Sustainable Cape	Interview 8-2022	no data
	Alex Nelson	Network Coordinator – OC Community Solutions		ongoing
	Joe Pacheco	Barnstable County Human Serv		Meeting 6-2022
	Janet Cummings	Cape Cod Hospital Foundation	Interview 4-2022	email 10/22 about grant
	Suzie Hauptman	Town of Falmouth	Interview 6-2022	
	Brianne Smith	Outer Cape Health Services Navigator	multiple interviews	ongoing partner
	Lower Cape Outreach	Andy Odell	Interview 8-2022	
	Sean Murphy	Barnstable Health and Environment	attended 9-13	guidance on issues
	Erika Woods	Barnstable Health and Environment	attended 9-13	financial
	Bethany Traverse	County social media	attended 10-25-22	Social media, communication plan
	Anonymous	Law officer	11-8-2022	Community life
	Barbara Blackwell	Clinical dietician	Several dates	Food and food pantries

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APPENDIX Tables

Table 3 : Basic demographics of survey respondents (in percent) compared to US Census data of Wellfleet, Barnstable County, state of Massachusetts, and United States

Variable	Survey	Wellfleet	Barnstable County	Massachusetts	United States
SEX					
Percent Male	56	45	47	48	
Percent Female	44	54.5	52	51.8	
RACE					
White alone	Not asked	95.8	91.8	69.6	75.8
African American		0.8	3.5	7	13.6
Hispanic Latino/a)		1.5	3.4		18.9
Asian		0.5	1.4	7.2	6.1
2 or more races			6.9	8.7	2.9
AGE % population (no. responses)	Survey	Wellfleet	County	Mass	US
18-35 YO	3 (35)	16	17.0	22.8	22.8
35 – 55 YO	20 (200)	19	25.5	25.4	25.4
55-70 YO	49 (507)	28	22.0	18.8	17.0
Over 70 YO	26 (278)	26	15	12	11.7
65YO older in US					16.9
Median age (years)	57	53.5	54.6	40.0	38.0
MARITAL STATUS (no. answers) and percent					
Married	(608) 59.6%	56	54	48	47.6
Widowed	(71) 7%	5.5	7.5	5.5	6.6%
Divorce	(95) 9.3%	6	13.5	9	10.8
Never Married	(179) 17%	33	25	36.5	33.5
Other	(52) 5%				
HAVE CHILDREN					
Yes*	473	17.1% under 18	19.5% under 18	30.6% under 18	32.8% under 18
No	547				
Children under 18 households	95 people = 9.3%	1 with 4 children	41 = 1 child		

Table 4: Economic characteristics of Wellfleet compared to Barnstable County, state of Massachusetts and United States in percentages

Variable	Survey	Wellfleet	Barnstable	State Mass	U.S.
HOUSING					
Own home	866 (85%)	95.2%	82%	61%	64.4%
Rent	129 (12.6%)				
Living there one year ago		89.7%	90.4%	87.4%	86.2%
Median house value (2021 dollars)*		540,206	In flux	422,856	In flux
Number households in town		1524			
EMPLOYMENT STATUS³⁸					
Retired	453 (44.4%)				
Full time	377 (37%)		59.3%	66%	60%
Part time	136 (13.3%)				
ANNUAL HOUSEHOLD INCOME					
Under 40,000	128(12.5%)				
40 to 80,000^	252(24.7%)				
80 to 100,000	156(15.3%)				
Over 100,000	484(47.4%)				
Per capita income (2021)	In dollars	45,275	44,505	45,555	35,384
Median household income	In dollars	82,696	74,336	81,215	62,200
Percent in poverty (2021)		11	7.7	9.8**	12.1
US Federal poverty level 2022 per person	Annual income				\$13,590
Health Insured (2021)				97.3%	91.3%
Bachelor's degree or higher at 25YO		55.4	46.4	46.6	32.9

*Prices do not reflect the recent high rise in property values in 2022

^\$80,000 upper limit for affordable housing on Outer Cape

100 is the comparison/baseline value to measure all communities

**Statista.com. 2022. <https://www.statista.com/statistics/205475/poverty-rate-in-massachusetts/>.

³⁸ Difficult to use annual data for these values because of seasonal nature of employment in Outer Cape. Discussed later

Table7: Regular PCP, Healthcare location, and health maintenance measure completion for Outer Cape residents

LOCATION FOR Health Care		
Outer Cape Health	606 = 59.4%	
Medical practice	264 = 25.9%	
Walk In	17 = 1.6%	
Other	133 = 13%	
ADEQUATE ACCESS to Health Care on Outer Cape		
Yes	473 = 46.4%	
No	546 = 53.5%	
Comments supplement		
Flu shot annually*	81%	56.5% in US
VACCINATIONS Up To Date*	985=97%	
CAN AFFORD MEDICATIONS*	920 = 90% yes	
REGULAR DENTAL CARE*		
Yes but some comments tell otherwise	869 = 85%	73.3% adult Mass
No	150 = 15%	
REGULAR CANCER SCREENINGS*		
Yes	860 = 84%	81.1% colon Massachusetts
No	108 = 11%	88% mammo Massachusetts
Not sure	51 = 5%	

* Healthy People 2030 recommended population measures

Table 8: Sufficient access to food overall and in the past week in Outer Cape residents

	Outer Cape		United States
Sufficient access to healthy food	Yes	946 = 93%	
	No	17 = 2%	
	Somewhat	51 = 5%	
Enough to eat past week	Enough	898 = 88%	US = 89.8% (2021)
	No	113 = 11%	US = 3.8%
	Somewhat	7 = 1%	US - 6.4%

Table: 9: Supplemental Nutrition Assistance Program and Household Units in Outer Cape from January 2021 to July 2022

	July 2022		Jan 2022		July 2021		Jan 2021	
	SNAP	DSS AU	SNAP	DSS AU	SNAP	DSS AU	SNAP	DSS AU
Wellfleet								
02663	0	0	0	0	0	0	0	0
02667	160	240	154	234	205	137	205	137
Total	160	240	154	234	205	137	205	137

AU = adult living unit/household getting any DSS services, i.e. MassHealth, housing assistance

Source : Massachusetts Department of Social Services

Table 12: Mental Health issues in Outer Cape survey

BEING TREATED FOR MENTAL HEALTH by health care professional		Massachusetts	United States
Yes	20% = 208	8.1% (2019)	19.8%
		31.4% (2021)	
IF YOU NEEDED MENTAL HEALTH CARE know where to find information			
Yes	51%		
No	411 = 40%		
Other	96 = 9%		
FAMILY MEMBERS CURRENT with current mental health diagnosis			
Yes	214 = 20%		
No	786 = 77%		
PAST YEAR known someone who committed suicide			
Yes	237 = 23%		
No	781 = 77%		

Table 13: Outer Cape resident info on substance abuse

#37 BINGE DRINKING PAST MONTH	
Yes	16
CONTROLLED DRUG IN EXCESS	
Yes	10 = 1%
MARIJUANA USE PAST MONTH	
Never	666 = 65%
1-5 times	170 = 17%
More than that	184 = 17%
USE TOBACCO PRODUCTS	
Yes	61 = 6%
No	959 = 94%
Cigarettes biggest tobacco = 46 people	

ASSESSMENT SURVEY

NEEDS ASSESSMENT QUESTIONS

1.'What town do you live in?

Provincetown

Truro

Wellfleet

2. What sex were you assigned at birth?

Male

Female

Intersex

Other

3. What is your age?

18-35

35-55

55-70

70 and above

4. What is your Marital Status ?

Currently married

Widowed

Divorced

Separated

Never married

Other

5. Do you have children?

Yes

No

6. How many children under the age of 18 are in your household?

7 . Do you rent or own where you live?

Rent Year Round

Rent Seasonally

Own

Currently homeless

Other

8. What is your Employment Status?

Employed full time
Employed part time
Unemployed
Retired
Disabled
Other

9. What is the approximate annual income in your household?

Under \$40,000
\$40,000 to \$80,000
\$80,000 to \$100,000
Over \$100,000

10. What is your primary mode of transportation?

Personal vehicle
Bus
Bike
Walking
Other

11. Do you have a regular healthcare provider (PCP, family medicine, pediatrician)

Yes
No
Other

12. Where do you and your family usually seek medical care?

Outer Cape Health Services
Private medical practice
Walk in clinic
Other

13. Do you feel you have adequate access to Healthcare Services on the Outer Cape?

Yes
No

14. If not, please tell us why in a few words. ..

15. Are all routine adult and child vaccinations up to date in your family?

Yes
No
Other

16. Do all members of your household get an annual flu shot?

Yes

No

Other

17. Do you know your HIV status?

Yes

No

Other

18. Please indicate if you have any of these chronic health conditions

Hypertension, Lung Disease, Diabetes,
Heart Disease, Obesity, Cancer, High
Cholesterol, None

19. Can you afford your necessary medications?

Yes

No

Not applicable

Other

20. If not, why?

21. Do you (and your children) receive regular dental care at least once a year?

Yes

No

Other

22. Do you get all your regular interval cancer screenings ?

Yes

No

Not sure

23.If not, why ?

24. Do you (and your children) get 30 minutes or more of aerobic exercise five times a week?

Yes

No

25. Does your family have regular/easy access to healthy foods (fresh fruits and vegetables)?

Yes

No

Somewhat

Other

26. If not why ?

27. Have you and/or your family not had enough to eat at any time in the last week?

Yes

No

Somewhat

Other

28. Have you been told by a medical provider you are obese?

Yes

No

Other

29. Is your daily diet high in refined sugars (cookies, candy, foods with high fructose corn syrup)?

Yes

No

Somewhat

Other

30. Is your daily diet high in saturated fat (fried foods, fast foods) ?

Yes

No

Somewhat

Other

31. Do you and/ or family eat five or more servings of fruits or vegetables each day?

Yes

No

Other

32. Are you currently being treated by a health care professional for any mental health diagnoses

Yes

No

Other

33. If you needed mental health care, do you feel you have adequate access to those services on the Outer Cape?

Yes

No

Not Applicable

Other

34. If not, why?

35. Do you have family members currently being treated for a mental health diagnosis?

Yes

No

Other

36. In the past year, have you personally known anyone who died from suicide or illegal substance overdose?

Yes

No

37. In the past month, approximately how many times, if at all, have you engaged in binge drinking (defined by NIH as 5 or more drinks within 2 hours)

38. In the past month, have you taken a controlled (medically prescribed) drug in excess of prescribed amounts?

Yes

No

39. In the past month, how many times have you used marijuana in any form?

Category answers

40. Do you use tobacco products?

Yes

No

41. Which tobacco products do you use? Choose all that apply.

42. What do you feel was the greatest social or health impact from COVID on the Outer Cape? Please rank from greatest impact to least impact. (use the arrows to move the items up and down)

43. Was there a social or health impact that was not listed above? Please briefly tell us below.

44. What do you think are the 3 greatest social, economic, or health issues facing the Outer Cape communities in the next 10 years?

45. OPTIONAL: If you would like to be interviewed by Public Health staff please include your name and best way to contact you below (phone and/or email). All information gathered in this survey is confidential. Identifying information will never be shared with the public.

46. How did you hear about the Outer Cape Public Health Needs Assessment?