

Community Health Assessment & Community Health Improvement Plan for Hingham, MA

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Hingham
Massachusetts



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Introduction

COLLABORATION: BOSTON UNIVERSITY SCHOOL OF PUBLIC HEALTH & HINGHAM, MA

In an ongoing commitment to fostering a healthier community, our collaborative initiative has undertaken a comprehensive effort to address mental health concerns, disease burden, and alcohol and substance use issues among the 18-59 age population in Hingham, Massachusetts. This partnership, combining the expertise of local stakeholders and health professionals, has been designed to improve overall health and health outcomes within the town. The focus on the 18-59 demographic can be attributed to health assessments being conducted in school settings for those under 18 and at senior living centers for residents over 60. Consequently, a fundamental focal point within this collaboration revolves around the need for improved comprehension of health conditions and requirements within the 18-59-year-old Hingham population.

Our journey began with an extensive exploration of Hingham's history, demographics, and socio-economic landscape. Background research provided crucial insights into the town's unique characteristics, contributing factors, and historical precedents that might influence current health challenges. This groundwork offered a valuable contextual understanding and guided our subsequent endeavors to tackle the identified issues.

To create a comprehensive picture of Hingham's health-related challenges, we then conducted an environmental scan and demographic review. This involved analyzing social determinants of health, such as economic status, education, and access to healthcare services. The mapping of these factors unveiled an understanding of the foundational drivers contributing to the town's challenges regarding mental health, disease prevalence, and substance use concerns. A commitment to providing evidence-based interventions prompted the compilation of available health statistics from a diverse set of sources. This data collection identified trends, patterns, and areas of concern related to mental health, disease burden, and substance use within Hingham. Recognizing the importance of local perspectives, primary data was collected via key informant interviews conducted with relevant members of the Hingham community. These stakeholders, ranging from healthcare professionals to community leaders, provided invaluable insights into the nuanced challenges faced by the town. The experiences and perspectives of these dedicated stakeholders enriched our understanding of the unique dynamics within Hingham. This information aided us in tailoring strategies aligned with the community's needs and aspirations. These statistics and key informant interviews laid the foundation for creating a community health improvement plan (CHIP) comprised of targeted goals and objectives.

BACKGROUND ON HINGHAM, MASSACHUSETTS

Fifteen miles southeast of Boston in Plymouth County and bordering the North Atlantic Ocean, the town of Hingham takes pride in its rich colonial history (4). Established in 1635 by English settlers (3), Hingham has continued to preserve its colonial heritage (7). The 2022 Annual Hingham Town Report reports a population of 24,903 residents (5). The growth in residents over time can be attributed to Hingham's suburban setting, high standard of living, and convenient access to Boston. The town residents enjoy a variety of transportation methods to and from Boston, including driving, biking, and the MBTA – which encompasses a ferry, commuter rail, and bus services to Hingham (1).

Hingham's strong sense of community fosters a welcoming and supportive environment. Residents come together for local events, volunteer initiatives, supporting local businesses, or through civic engagement. In a community where the majority of residents identify as white (97.5%) (2), efforts to promote racial diversity and inclusion are being established in the town's Master Plan (1). These diversity initiatives are intended to benefit the well-being of the Hingham community.

Hingham holds immense pride in its commitment to tree care and planting. Their efforts have earned national recognition as "Tree City USA" 29 times. Hingham stands firm in their commitment to the preservation of their natural environment (4). As part of this commitment, Hingham is dedicated to maintaining and implementing walking paths, trails, and woodlands.

The town operates through a well-established Board and has an Open Town Meeting form of governance, actively engaging Hingham residents in the shaping of their community (1). A prime example of this engagement is the Hingham Downtown Association (HDA), a self-governing group of business owners, property owners, civic groups, and neighbors, working to put on year-round community events and promotions (5). The HDA is able to implement inclusive town events such as Small Business Saturdays, Art Walk Sundays and Wellness Wednesday initiatives (5). Through HDA's official website, the town residents are offered a convenient, user-friendly way to view the comprehensive range of these initiatives and services.

Hingham's economy initially had a varied industrial history, including agriculture, lumber, fishing as well as manufacturing (6). In the past 20 years, the number of employers in Hingham increased by 22% and total employment by 43% due to significant commercial investment (1). Presently, Hingham's economy is diverse, with several industries contributing to its prosperity. The three leading industries are Finance, Insurance, Real Estate (22%), Professional, Scientific, Management (20%), Education, Health Care, and Social Assistance (21%) (1). The town embraces a mix of enterprises such as retail, professional services, as well as light industrial businesses such as manufacturers, construction, and technology, with its largest employer being Blue Cross Blue Shield (6).

The town of Hingham was not immune to the lasting effects of the COVID-19 pandemic, such as an increase in job loss and the closure of town businesses (6). While the effects of COVID-19 are still felt throughout the community today, the community recently completed some noteworthy initiatives. This included the completion of the town's Master Plan, a self-evaluation to verify compliance with the Americans with Disabilities Act, the development of a Hazard Mitigation Plan, and the creation of an Elder Services Community Needs Assessment and Center (1). Hingham is also in the process of a strategic allocation of funds from a statewide opioid settlement.

Methods

The foundation of this community health assessment was a primary interview with Hingham's Executive Health Officer, Susan Sarni, who provided direction on potential areas of concern for the health of people aged 18-59 in Hingham, MA. There were three major areas of public health concern: mental health, disease burden, and alcohol/substance use. In order to allocate attention to each of these subject areas, three sub-groups were created, with each targeting one area of concern. After this primary interview, as well as some research on the town history and social identities, the general process of data collection and analysis consisted of: environmental scan and mapping, demographic characteristics, health statistics summaries, and key informant interviews.

QUANTITATIVE DATA AND BACKGROUND

The quantitative data collection process was driven by various secondary data sources available within Hingham and Massachusetts. The first phase of data collection was environmental scans and mapping in order to identify potential environmental characteristics that may impact the health and experiences of residents in Hingham, MA. The team crafted nine maps (three within each area of interest) that began to shape the understanding of potential external and structural factors that may play a role in the health of Hingham residents. Following this, the team utilized US Census data to compile quantitative data regarding demographics of Hingham residents.

Expanding on these characteristics, ten health outcomes and potential distributions or disparities of these health outcomes within Hingham residents were investigated. Topics explored included: Lyme disease, binge drinking, opioid deaths, opioid risk, birth trends, breast cancer, health burden of suicide, lung cancer, and liver cancer. The data was organized at both the state and local level and differentiated among various demographic differences (i.e. sex, income, age, exposures, etc.). This allowed for analysis of potential disparities within Hingham as well as differences from state reference data. In addition, longitudinal data was collected within each health topic to conceptualize and convey trends in the health outcomes over time. This quantitative data collection and interpretation helped to increase the understanding of health trends and available secondary data and identify limitations in currently available data.

QUALITATIVE DATA AND KEY INFORMANT INTERVIEWS

A crucial part of this community health assessment was conducting nine key informant interviews. Prior to conducting these interviews, each subgroup crafted five questions regarding their area of interest. These questions went through several draft and piloting phases prior to being compiled into a focus group guide. Questions were checked to ensure there were no instances of leading, bias, or double-barreled questions. The final focus group guide consisted of 13 primary questions as well as additional open questions and prompts (see appendix).

The key informants were current representatives of local and regional health-related services and/or groups. Individual interviews with each key informant were conducted virtually via zoom. Recordings of the interviews were used for transcription purposes and then deleted. Following the interviews, interviewers analyzed the transcripts for themes and new information. These interviews, along with the quantitative data, strongly shaped and informed the Community Health Implementation Plan (CHIP).

COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP)

The quantitative and qualitative data was used to identify recommendations for addressing areas of need and utilizing areas of strength related to public health in Hingham. Within each subgroup (mental health, disease burden, and alcohol/substance use) 2-3 broad goals were crafted with associated objectives, strategies, and resources. Each of these goals were driven by key informant comments as well as secondary data. For brevity, it was important to narrow down to a total of three major goals for this report. One goal was chosen from each subgroup for inclusion based on the identified priorities, urgency, affordability, and feasibility. A key aspect of formulating the objectives was ensuring they were specific, measurable, attainable, realistic, and time-bound (SMART). Strategies were tailored to Hingham-based events, people, infrastructure, jobs, and locations.

Environmental Assessment

OUTDOOR GREEN SPACE AND UTILIZATION

The first mapped feature within Hingham, MA is the location and utilization of outdoor green spaces within the town limits (*Figure 1*). In Hingham, approximately 26.61% of land is dedicated to green or open space as indicated and of that, 84.11% is open to the public (1). Hingham has higher residential use of land than the state average, and lower open undeveloped land and high density residential. Only 4% of households in Hingham have no auto vehicle available for use, much lower than the 12% statewide (2). Safe ways to get around Hingham that do not involve a car are lacking outside of the downtown area, with limited public transportation, walking, and biking routes. There are a variety of recreation opportunities for Hingham residents to get outside, though a car is necessary to access many of them – including Wompatuck State Park which is very popular for mountain biking. Hingham also has a number of athletic fields and outdoor courts, though as these mainly appear oriented towards youth activities, it is unclear what percentage of use is by those in the 18-59 age range. Green space recreation opportunities in Hingham include: bicycling, camping, cross country skiing, general play, hiking, horseback riding, hunting, nature observing, picnicking, sightseeing, snowmobiling, walking/jogging, golf, swimming, tennis, beach, yoga, pickleball, skateboarding, ball sports, boating, and more. *Figure 2* depicts Strava data of recreational running activity within Hingham (3). From this mapping it can be seen which spaces

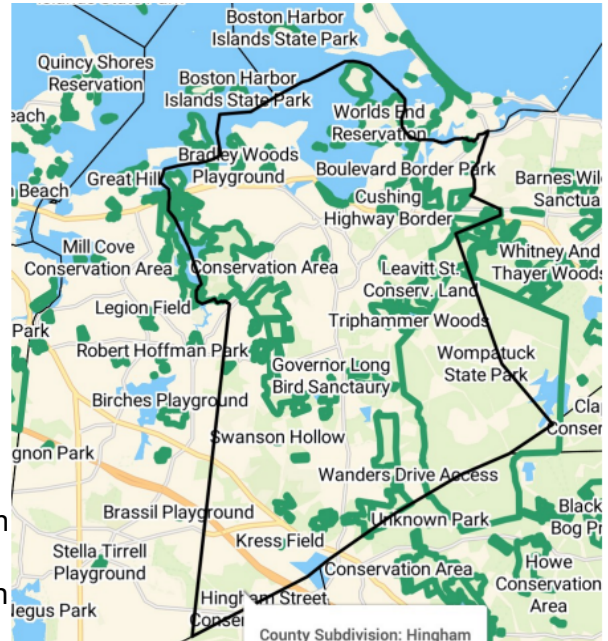


Figure 1. Outdoor Public Green Spaces in Hingham, Massachusetts. Green spaces are bordered by green lines.
Source: Policymap.com

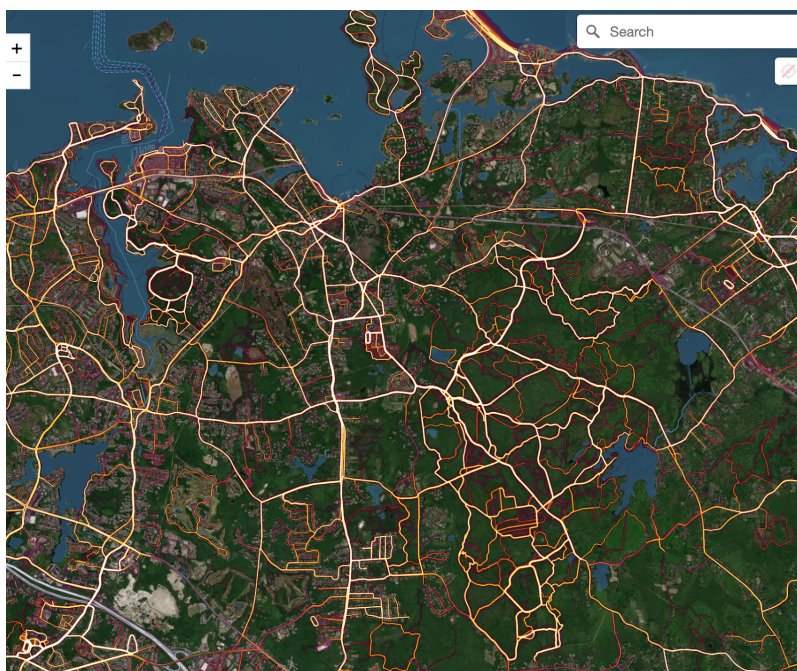


Figure 2. Global Heatmap of running as mapped through Strava in Hingham MA. This map shows relative aggregated data from August 2022 - August 2023.

Note: Brighter yellow lines indicate the most used running routes, red lines indicate the less popular routes, and roads/trails without yellow/orange/red lines are not used for running. Source:

Strava heatmap

LOCATIONS OF LOCAL HEALTH AND MENTAL HEALTH SERVICES

Mapped in *Figure 3* and *Figure 4* are local health and mental health services in 2023. Based on the *Figure 3* mapping of retail-based healthcare, community health centers, nursing facilities, and hospitals, Hingham appears to be limited in locally accessible resources. There are three nursing facilities and two healthcare organizations (home health services and disability support services) within the town limits. South Shore Hospital in South Weymouth is the closest emergency facility, approximately 3.5 miles from town limits and 20 minutes from Hingham Center, and two additional medical centers are also just outside of the town. Similarly, in *Figure 4* it is evident that mental health services are limited and the location of most licensed therapists is in the southwest region of the county. Based on conversations with the key informants, many individuals in Hingham are unable to access these resources due to high wait times and limited availability. Those who do access mental health services often do so utilizing telehealth from

state-wide therapists (4). As an area with limited public transportation, households without vehicles may face reduced access to health services and urgent care needs, leading to poorer health status in the long-term.

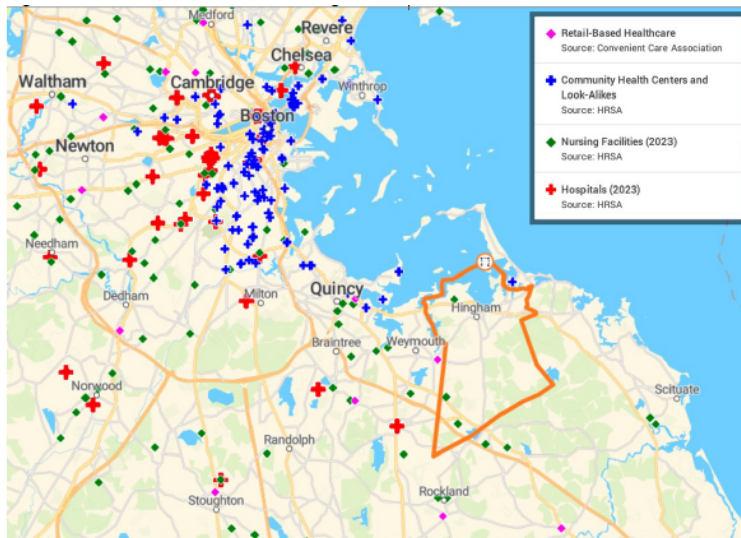
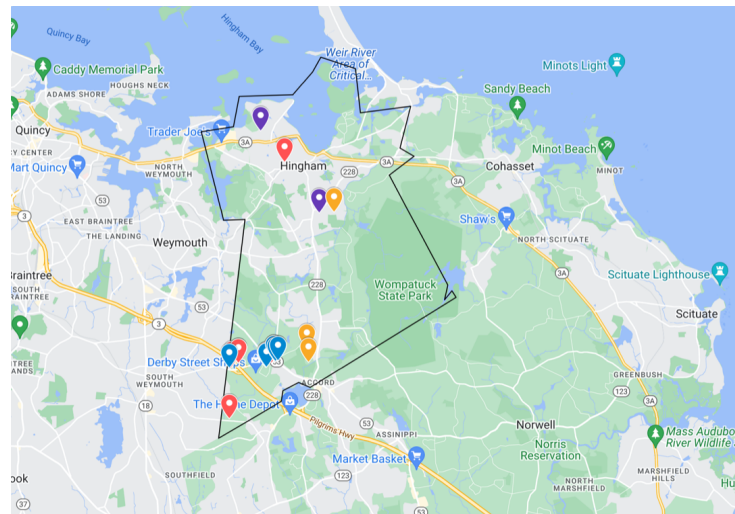


Figure 3. Health service facilities in/near Hingham, MA

Source: PolicyMap <https://www.policymap.com/newmaps/#/>.



Key	
Red square	Mental Health Resources
Purple square	Rehabilitation Support (Alcohol and Drug)
Yellow square	Schools
Blue square	Individual Mental Health Practitioners

Figure 4. Mental Health & Substance Abuse Resources within Hingham, MA

Source: Google my Maps <https://www.google.com/maps/d/edit?mid=1EW0WeeGtisyqqJiG862wKNb5ecJXtk&usp=sharing>

RECREATIONAL SUBSTANCE USE SALE LOCATIONS

Based on the *Figure 5* map of bars, liquor stores, breweries, and cannabis dispensaries in Hingham, MA and the surrounding area, there seems to be a high concentration of locations where cannabis and alcohol may be available to Hingham residents. With this availability and access to alcohol and other substances, it is known that there may be an increased risk for alcohol consumption, drunk driving, and alcohol-related motor vehicle crashes (5,6).

Additionally, MA has a “social host” liability law, where the host of a social gathering can be held liable for any damages or injuries caused by attendees at that gathering (7). It is most often applied for motor vehicle crashes where a third party is injured. It may also be applied if parents supply alcohol to minors, who then cause harm or injury (7). Based on conversations with key informants, this information is corroborated by high social use of drinking, specifically among women ages 30-50. An environment with high access to alcohol as well as a social norm around drinking is an area of concern for Hingham.

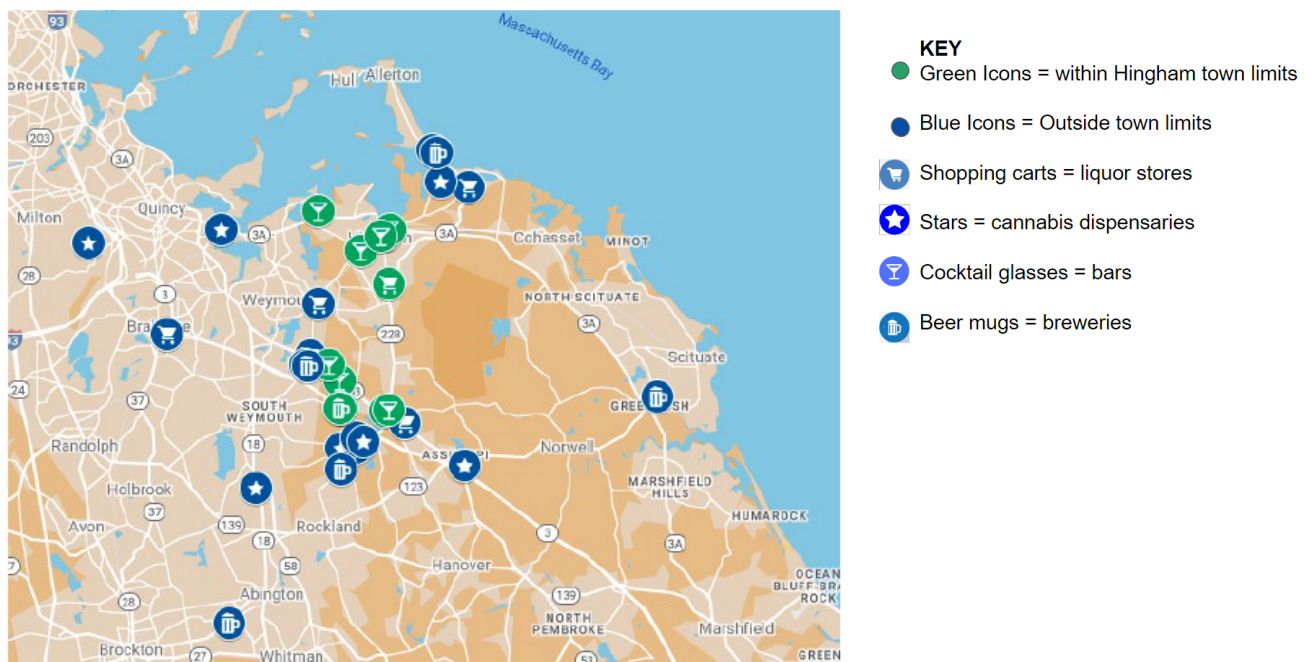


Figure 5. Map of Bars, Liquor Stores, Breweries, and Cannabis Dispensaries in Hingham, MA and the Surrounding Area.

Source: Google My Maps

<https://www.google.com/maps/d/viewer?mid=1oEDa83a5DXeocRApimxx6Y8FZZqPSPQ&ll=41.9888667207567%2C-71.02153210412341&z=11>

Demographic Data

Table 1 presents a comprehensive overview of the demographic characteristics of Hingham and Massachusetts. By examining key variables such as population, age distribution, race/ethnicity, income, language spoken at home, and health insurance coverage, we can understand the unique profiles that set Hingham apart from the broader Massachusetts community.

Table 1. Selected Demographic Characteristics for Hingham, MA and Massachusetts, 2020 & 2021

CHARACTERISTIC	Hingham, MA		MA	
	Number	% of total	Number	% of total
Total population*	24,284	100%	7,029,917	100%
Age**				
0 to 17 years	6,032	25.1%	1,361,940	19.5%
18 to 24 years	1,303	5.4%	688,028	9.9%
25 to 39 years	2,477	10.3%	1,450,687	20.7%
40 to 59 years	7,057	29.3%	1,787,951	25.6%
60+ years	7,192	29.9%	1,696,117	24.3%
Race/Ethnicity*				
White	22,218	91.5%	4,748,897	67.6%
Two or more races	731	3.0%	328,278	4.7%
Asian	550	2.3%	504,900	7.2%
Hispanic/Latinx	539	2.2%	887,685	12.6%
Black/African American	143	0.6%	457,055	6.5%
Other race	93	0.4%	92,108	1.3%
American Indian & Alaska Native	10	0.0%	9,387	0.1%
Native Hawaiian & Pacific Islander	0	0.0%	1,607	0.0%
Language spoken at home** (Population 5 years and over)				
English	21,323	94.5%	5,008,949	75.5%
Other Indo-European languages	716	3.2%	609,343	9.2%
Asian & Pacific languages	254	1.1%	292,912	4.4%
Spanish	233	1.0%	624,055	9.4%
Other languages	43	0.2%	103,289	1.6%
Place of birth**				
United States	22,728	94.5%	5,757,235	82.4%
Foreign born	1,333	5.5%	1,227,488	15.6%
Median income**	\$154,300	-	\$89,645	-
Mean income**	\$234,975	-	\$124,789	-

Educational attainment** (Population 25 years and over)				
Less than HS	290	1.8%	439,192	8.9%
HS graduate	1,758	10.5%	1,124,134	22.8%
Some college, no degree	1,428	8.5%	694,438	14.1%
Associate degree	1,062	6.3%	376,568	7.7%
Bachelor's degree	6,107	36.5%	1,250,748	25.3%
Graduate or professional degree	6,081	36.4%	1,049,675	21.3%
Persons with births in past 12 months				
15 to 19 years	0	0%	461	0.6%
20 to 34 years	55	24.7%	48,282	64.3%
35 to 50 years	168	75.3%	26,393	35.1%

DATA SOURCES: *U.S. Census Bureau, 2020 Census (Tables [P1](#), [P9](#)); **U.S. Census Bureau, 2021 ACS 5-Year Estimates (Tables [S0101](#), [S1601](#), [DP02 S1901](#), [S1501](#), [S1301](#))

POPULATION SIZE AND AGE

Based on the 2020 U.S. Census, Hingham, Massachusetts has a population of 24,284 residents, representing 0.3% of the total state population. In comparison to Massachusetts, Hingham has slightly larger populations of children ages 0-17, middle adults ages 40-59, and older residents ages 60+, while the populations of young adults ages 18-24 and 25-34 are 5% and 10% smaller respectively. A larger population of aging and older adults could have long-term influences on the town's healthcare/social services needs and labor market, indicating the importance of geriatric care, chronic disease management and community engagement. The population of interest for this assessment is adults between ages 18-59, which accounts for almost half (45%) of Hingham's residents.

RACE/ETHNICITY, LANGUAGE, AND PLACE OF BIRTH

Hingham has a predominantly white, non-Latinx population, accounting for 91.5% of its residents, and most residents are native-born (95%). The next largest demographic is persons of two or more races (3%), followed by Asian (2.3%) and Hispanic/Latinx residents (2.2%). Upon closer inspection, among those identifying as two or more races, 40% identified as white and some other race and 32% identified as white and Asian. While both Hingham and Massachusetts have majority English-speaking populations, there is more variability in the prevalence of other languages spoken at home. In Hingham, "Other Indo-European languages" is the next most prevalent language reported (3%), followed by Asian languages and Spanish at roughly 1% each. Considering the racial and ethnic diversity in Hingham and planning processes for public health interventions should take special care to ensure the needs of all groups are met equitably.

INCOME & EDUCATION

Compared to Massachusetts, Hingham is demonstrably wealthier and more educated overall. Based on Table 1, the median household income in Hingham is \$154,300, which is 172% of the Massachusetts state median household income (\$89,645). The mean household income in Hingham was \$234,975, indicating that income levels in Hingham are skewed to the right with some individuals in Hingham earning significantly higher incomes. The 2021 ACS 5-Year Estimate reports that more than 85% of adults have received an education beyond high school compared to 69.6% statewide. These findings suggest that many Hingham residents may have better access to healthcare services and financial resources compared to most Massachusetts residents, based on levels of income and formal education.

FERTILITY

In 2021, Hingham had zero births to persons under age 18 and Massachusetts also has a very low number of births to this age group. However the rates of childbearing among other age groups are significantly different. In Hingham, most people giving birth are over 35 years of age (75%), while within Massachusetts the highest rate was observed among persons ages 20-34. Pregnancy after 35 is considered an advanced maternal age, which is associated with increased health risks¹.

Table 2. Health Insurance Coverage for Adults Ages 19-64 in Hingham, MA + Massachusetts, 2021

Age Group	Hingham, MA		MA (State)	
	Number insured	% of age group	Number insured	% of age group
<i>Overall</i>	23,701	99.5%	6,742,451	97.5%
19 to 25 years	1,066	99.3%	655,044	95.6%
26 to 34 years	1,007	100.0%	834,585	94.7%
35 to 44 years	3,166	99.6%	832,225	96.0%
45 to 54 years	3,517	99.7%	884,803	96.8%
55 to 64 years	3,344	98.3%	932,362	97.4%

DATA SOURCE: U.S. Census Bureau, 2021 ACS 5-Year Estimates (Table [S2701](#))

INSURANCE

Both Hingham and Massachusetts have relatively high health insurance coverage for 19-64-year-old civilian non-institutionalized populations, as displayed in Table 2. However, Hingham stands out with slightly better coverage rates across all age groups than the state averages. Based on the 2021 ACS 5-Year Estimates, in Hingham an impressive 99.5% were insured. Only 120 residents lacked insurance and 100% of them were white. Conversely, the state of Massachusetts has 97.5% insured. Further breakdown by age groups shows that Hingham maintains consistently high coverage rates of 98.3% to 100% across different age groups. The only Hingham age group with 100% coverage is residents ages 26-34. Massachusetts has slightly lower coverage rates varying from 94.7% to 97.4% across age groups. Interestingly, Massachusetts residents ages 26-34 have the lowest coverage rate of all age groups.

Table 3. Population with a Disability by Age Group in Hingham, MA and Massachusetts, 2021

Age Group	Hingham, MA		MA (State)	
	Persons with disability	% of age group	Persons with disability	% of age group
<i>Overall</i>	2,333	9.4%	803,600	11.6%
Under 18 years	116	1.9%	63,228	4.6%
18 to 34 years	117	4.9%	110,707	6.7%
35 to 64 years	443	4.4%	278,278	10.2%
65+ years	1,557	29.3%	357,933	30.3%

DATA SOURCE: U.S. Census Bureau, 2021 ACS 5-Year Estimates (Table [S1810](#))

Table 4. Disability Type for Adults Ages 18-64 in Hingham, MA and Massachusetts, 2021

Disability Type by Age Group	Hingham, MA		MA (State)	
	Persons with disability	% of age group	Persons with disability	% of age group
Hearing difficulty				
<i>Overall</i>	65	0.5%	63,046	1.4%
18 to 34 years	0	0%	9,593	0.6%
35 to 64 years	65	0.5%	53,453	2.0%
Vision difficulty				
<i>Overall</i>	74	0.6%	64,251	1.5%
18 to 34 years	0	0%	15,170	0.9%
35 to 64 years	74	0.6%	49,081	1.8%
Cognitive difficulty				
<i>Overall</i>	327	2.6%	189,037	4.3%
18 to 34 years	117	4.9%	79,097	4.8%
35 to 64 years	210	2.1%	109,940	4.0%
Ambulatory difficulty				
<i>Overall</i>	166	1.3%	142,769	3.3%
18 to 34 years	15	0.6%	11,146	0.7%
35 to 64 years	151	1.5%	131,623	4.8%
Self-care difficulty				
<i>Overall</i>	51	0.4%	58,895	1.3%
18 to 34 years	0	0%	12,697	0.8%
35 to 64 years	51	0.5%	46,198	1.7%
Independent living difficulty				
<i>Overall</i>	103	0.8%	140,315	3.2%
18 to 34 years	28	1.2%	44,612	2.7%
35 to 64 years	75	0.7%	95,703	3.5%

DATA SOURCE: U.S. Census Bureau, 2021 ACS 5-Year Estimates (Table [S1810](#))

DISABILITY

The prevalence of disabilities among noninstitutionalized Hingham residents ages 18-64 (9%) is lower than that of Massachusetts (11%). Table 3 presents the prevalence of disability by type of difficulty for Hingham and Massachusetts residents ages 18-34 and 35-64, as reported in the 2021 ACS 5-Year Estimate. According to the data, the prevalence of most disability types for each age group is significantly lower (generally more than 50% lower) in Hingham compared to Massachusetts with two exceptions. The proportion of cognitive difficulties as well as ambulatory difficulties for adults ages 18-34 is roughly equal for Hingham and Massachusetts.

KEY FINDINGS

Hingham's most notable demographic characteristics, compared to the rest of Massachusetts, include a growing aging population, a low (but present) degree of racial/ethnic/linguistic

diversity, a higher median household income, robust health insurance coverage. These findings highlight the importance of understanding these differences for effective policymaking and health intervention planning.

Health Data

The health data presented in this section of the Hingham Community Needs Assessment plays a pivotal role in shaping the focus areas of the CHIP, guiding the development of goals and intervention strategies. Through data collection and analysis, a comprehensive understanding of Hingham's community's health landscape was acquired. For a more comprehensive exploration, additional health data tables and figures on the focus areas and other topics can be found in the appendix.

MENTAL HEALTH

Table 1. Suicide Occurrences Based on Circumstances in Massachusetts (2020)

	Count	%
Current mental health problem	429	68.9
Current treatment for mental health/substance use	337	54.8
Alcohol/Substance use problem	201	32.7
Left suicide note	203	33.0
History of suicide attempts	131	21.3
Intimate partner problem	125	20.3
Job/Financial problem	88	14.3
Physical health problem	104	16.9

Source: Massachusetts and Plymouth Data Source: Massachusetts Violent Death Reporting System (MAVR). 2020 Suicide Data Table. [Online]. Available: [<https://www.mass.gov/doc/2020-suicide-data-table/download>] Accessed: [10 August 2023].

Overview: The breakdown of suicide circumstances in MA, highlights key factors contributing to these events. Notable figures include 429 cases (68.9%) attributed to current mental health problems and 337 (54.8%) involving ongoing mental health or substance use treatment. The table provides a comprehensive understanding of the nuanced circumstances surrounding suicides, informing the need for targeted prevention and support strategies.

Table 2. Mortality and Estimated Suicides by Sex, Age and Race/Ethnicity in Massachusetts, Plymouth County, and Hingham (2020)

	MA		Plymouth County		Hingham	
	N – 7,029,949		N – 530,819 <i>* Denotes Synthetic Estimation per 100,000</i>		N – 23,983 <i>* Denotes Synthetic Estimation per 100,000</i>	
	Count	%	Count	%	Count	%
All Suicide Deaths	615	100	55	9.1	1	0.2
Biological Sex						
Male	471	76.5	42	9	1.8**	-
Female	144	23.4	13	9.4	0.6**	-
Age						
0-4	4	0.7	-	-	-	-
15-24	66	10.7	4.7**	-	0.2**	-
25-34	99	16.1	5.7**	-	0.1**	-
35-44	93	15.2	6.4**	-	0.3**	-
45-54	126	20.5	11**	-	0.6**	-
55-64	106	17.2	8.6**	-	0.4**	-
65-74	79	12.8	6.4**	-	0.3**	-
75-84	25	4.1	1.9**	-	0.1**	-
85+	17	2.8	1.2**	-	0.1**	-
Race/ethnicity						
Asian, non-Latinx	25	4.1	0.4**	-	0.02**	-
Black, non-Latinx	24	3.9	1.8**	-	0.05*	-
Latinx	49	8	1.2**	-	0.03**	-
White, non-Latinx	513	83.4	45.3**	-	2.4 **	-
Other	4	0.7	-	-		

Sources:

1. Massachusetts and Plymouth Data Source: Massachusetts Violent Death Reporting System (MAVR). 2020 Suicide Data Table. [Online]. Available: [<https://www.mass.gov/doc/2020-suicide-data-table/download>] Accessed: [10 August 2023].
2. Population Data Source
 - a. Massachusetts, (2020): U.S. Census Bureau. QuickFacts: Massachusetts. [Online]. Available: [<https://www.census.gov/quickfacts/fact/table/MA/POP010220#POP010220>]. Accessed: [24 August 2023].
 - b. Plymouth Age data: American Community Survey. ACS 5-Year Estimates Subject Table S0101 [Internet]. 2020. Plymouth County, Massachusetts: U.S. Census Bureau; [cited 2023 Aug 23]. Available from: [<https://data.census.gov/table?q=Plymouth+County,+Massachusetts&y=2020&tid=ACSST5Y2020.S0101>]

- c. Plymouth Race Data: U.S. Census Bureau. (2020). Decennial Census: DEC Redistricting Data (PL 94-171), Table P1. Total population in Plymouth County, Massachusetts [Data set]. Retrieved from <https://data.census.gov/table?q=Plymouth+County,+Massachusetts&y=2020&tid=DECENNIALPL2020.P1>
 - d. Plymouth Ethnicity Data: P9: HISPANIC OR LATINO, AND NOT ... - Census Bureau Table [Internet]. [cited 2023 Aug 24]. Available from: <https://data.census.gov/table?q=Plymouth+County,+Massachusetts&t=Race+and+Ethnicity&y=2020&tid=DECENNIALDH C2020.P9>
 - e. Hingham Race/Ethnicity(2020): *U.S. Census Bureau, 2020 Census (Tables [P1](#), [P9](#))
 - f. Hingham Age/Sex (2020): U.S. Census Bureau. (2020). American Community Survey 5-Year Estimates Subject Table S0101: Selected Characteristics of Hingham town, Plymouth County, Massachusetts [Data set]. Retrieved from <https://data.census.gov/table?q=060XX00US2502330210&tid=ACSST5Y2020.S0101>
3. Suicide Data Trends in Massachusetts, 2020:
- a. Massachusetts Association for Mental Health (MAMH). Suicide Data Trends in Massachusetts, 2020. [Online]. Available: https://www.mamh.org/assets/files/2020-suicide-data-PPT_DPH.pdf. Accessed: [11 August 2023].
 - b. Massachusetts Association for Mental Health (MAMH). Suicide Data Trends in Massachusetts, 2020. [Online]. Available: https://www.mamh.org/assets/files/2020-suicide-data-PPT_DPH.pdf. Accessed: [11 August 2023].
 - c. Massachusetts Department of Public Health. Suicide Data Reports. [Online]. Available: <https://www.mass.gov/info-details/suicide-data-reports>. Accessed: [10 August 2023].
4. Hingham Suicide Data Source: Massachusetts Department of Public Health. 2020 Death Report. [Online]. Available: <https://www.mass.gov/doc/2020-death-report/download>. Accessed: [10 August 2023], Page 80.
- * **Footnote:** Formula used : crude synthetic estimate- $rate/100,000 * demographic\ population = \sim estimated\ count$
 % from synthetic estimates all yielded <0.5, thus not included. A placeholder of '-' was used .

Age Categories and Data Precision: The age categories were revised to ensure precise data capture and to prevent any inadvertent manipulation or misinterpretation.

Estimated Values and Contextual Information: Estimates denoted in ** were derived through meticulous calculations utilizing rates provided by the state of Massachusetts and Plymouth County, all other values were reported. See a breakdown of the rates below.

Suicide Rates by Sex in Plymouth County (2020) (MAVR): 16.3 per 100,000 for male and 4.8 per 100,000 for female. See source for details.

Suicide Rates by Age in Massachusetts (2020) (MAMH): The distribution of suicide rates by age groups in Massachusetts for the year 2020 is as follows:

- Ages 0-4: Data unavailable due to an insufficient count (N<6), rendering the data unstable.
- Ages 15-24: 7.1 per 100,000
- Ages 25-34: 9.9 per 100,000
- Ages 35-44: 10.8 per 100,000
- Ages 45-54: 14.5 per 100,000
- Ages 55-64: 11.2 per 100,000
- Ages 65-74: 11.4 per 100,000
- Ages 75-84: 7.2 per 100,000
- Ages 85 and above: 10.7 per 100,000

Suicide Rates by Race/Ethnicity in Massachusetts (2020) (MAMH): Notable suicide rates by race/ethnicity in Massachusetts for the year 2020 encompass:

- Asian, non-Latinx: 5.0 per 100,000
- Black/African American, non-Latinx: 4.0 per 100,000
- Latinx: 5.2 per 100,000
- White, non-Latinx: 11.0 per 100,000
- Other: Data unavailable due to an insufficient count (N<6), yielding unstable data.

Overview: Due to the lack of detailed Hingham-specific data, estimating the prevalence of suicide among Hingham's population aged 18-59 involves a nuanced consideration of Hingham residents' demographic composition and the established associations between suicide and

Massachusetts and Plymouth County. Despite Hingham reporting lower overall suicide rates, the presence of key risk factors such as age, gender, and mental health concerns as seen in Table 2 suggests that the prevalence of suicide among adults aged 18-59 in Hingham may surpass reported figures, aligning with trends observed in state and county data.

DISEASE BURDEN

Table 3. Prevalence of Lyme Disease in Hingham, MA from 2018-2023

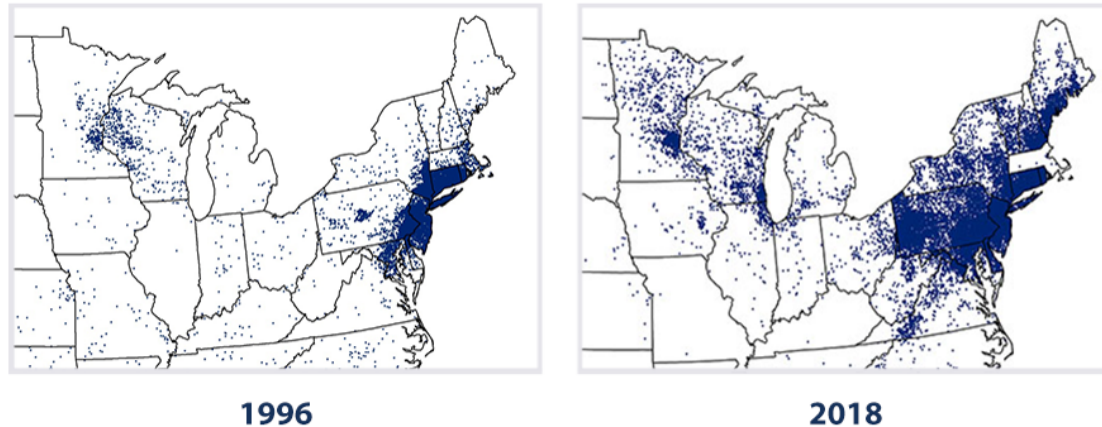
CHARACTERISTIC	n-59	Percent
Disease Stage	Confirmed	5 8.5%
	Probable	54 91.5%
Gender		
	Male	37 62.7%
	Female	22 37.3%
Age		
	<18	10 16.8%
	18–29	5 8.5%
	30–39	8 13.6%
	40-49	3 5.1%
	50-59	8 13.6%
	60+	25 42.4%
By Year		
	2018	3 5.1%
	2019	0 0%
	2020	3 5.1%
	2021	0 0%
	2022	28 47.4%
	2023 (as of 8/13)	25 42.4%

Source: Flynn T. Lyme Disease Data Spreadsheet. Email received from Flynn, Teresa flynnt@hingham-ma.gov. Sent on Tuesday, August 15, 2023, 10:23 AM. Subject: RE: Lyme data. Data extracted from 01/01/2018 to 08/13/23, sorted by year and age, including basic demographic information (with no identifying details). MAVEN data for years: 2018, 2022, 2023. Hingham, MA: Health Department; 2023.

Overview: There is a public health concern posed by Lyme disease in Hingham, MA. Over the years, the incidence of Lyme disease cases has seen a notable increase, surging from 3 cases in 2018 to 25 in 2023. Predominantly, men appear to be more susceptible to Lyme disease diagnoses compared to women, with the highest prevalence observed among individuals aged 60 and above. The distribution of cases highlights that Lyme disease predominantly affects White individuals (45.8%), with a notable proportion categorized as probable (54.2%) due to missing data, aligning with the local population's demographics. Moreover, the prevalence across age groups exhibits distinctive percentages, emphasizing the potential vulnerability to Lyme disease across various life stages. The variations in case distribution across different

years may imply potential fluctuations due to changes in screening protocol and reporting methods or environmental factors.

Figure 2: Mapping of Lyme Disease in Northeast United States: 1996 vs. 2018



Source: US EPA O. Climate Change Indicators: Lyme Disease [Internet]. 2016 [cited 2023 Aug 16]. Available from: <https://www.epa.gov/climate-indicators/climate-change-indicators-lyme-disease>

Overview: The significant rise in Lyme disease cases in the Northeast USA between 1996 and 2018 can be attributed to factors including evolving screening and reporting practices, heightened public awareness, and shifts in climate conditions. The notable absence of cases in MA for the year 2018 is attributed to variations in CDC and MA Lyme disease reporting styles. MA shifted from reporting based on both clinical diagnosis and lab test to solely relying on positive lab tests due to the burden posed on the state, local health boards, and providers (2). Given the region's conducive cool and moist climate, it is favorable for ticks carrying the disease. As Hingham experiences a resurgence in cases, the community is presented with an opportunity to allocate resources towards comprehensive research endeavors and heightened testing efforts to understand Lyme disease better and prevent its spread.

ALCOHOL/SUBSTANCE USE

Table 4: Crude prevalence of binge drinking among adults, Hingham and Massachusetts, (2021)

CHARACTERISTIC	MA *		Hingham ^		
	n	%	n	%	
All adults aged 18 and over	1,116	16.2	n/a	16.4	
Gender	Female	514	13.1%	1,646**	13.1
	Male	602	19.7%	2,265**	19.7
Age	18-24	170	24.1%	314**	24.1
	25-34	251	26.2%	280**	26.2
	35-44	225	18.7%	596**	18.7
	45-54	202	16.7%	591**	16.7
	55-64	161	12.2%	415**	12.2
	65+	107	6.2% +	343**	6.2

Source: * Behavioral Risk Factor Surveillance System, 2021

^ PLACES, Centers for Disease Control

Footnote: **Synthetic estimates based on state rates, * State Reference Rate

Overview: Binge drinking is defined as consuming five or more drinks on an occasion for men or four or more drinks on an occasion for women (1). There are significant variations in binge drinking in Hingham (as in the state) based on gender, age, race/ethnicity, education, and household income. Binge drinking rates were notably higher in males (19.7%) compared to females (13.1%), with the highest prevalence observed in individuals aged 18 to 24 (24.1%). Racial and ethnic differences are evident, with non-Hispanic Whites at 17.7%, while Hispanics and diverse education and income levels exhibit distinct patterns.

Table 5: Alcohol-Impaired Driving Deaths (out of all vehicle-related deaths) in MA and Plymouth County (2020)

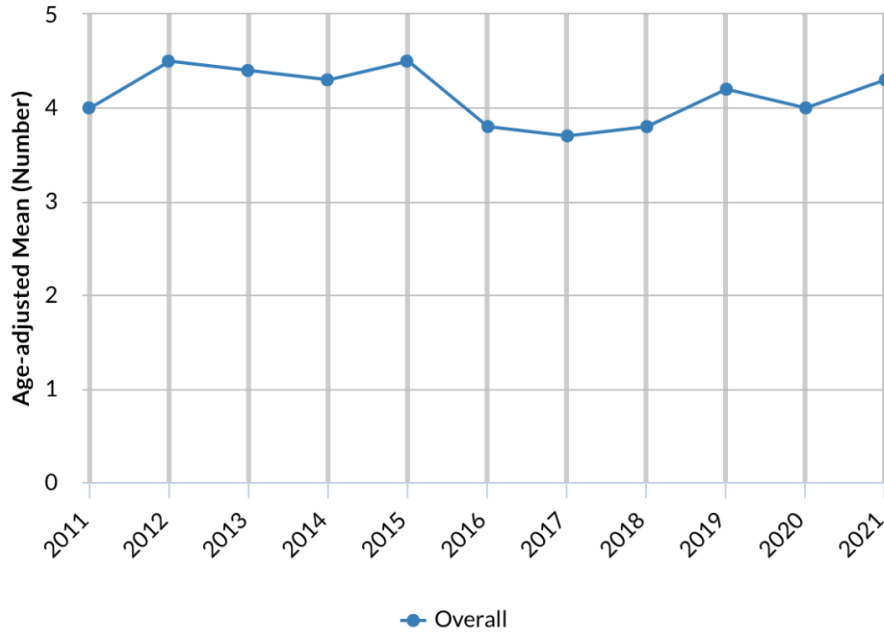
	MA		Plymouth County, MA	
	n	%	n	%
Alcohol-Impaired Driving Deaths	541	31	62	35

Source: 2023 County Health Rankings

Overview: The table presents alcohol-impaired driving deaths as a percentage of all vehicle-related deaths in Massachusetts (31%) and Plymouth County (35%) in 2020, revealing higher rates in the county. Although Hingham's overall binge drinking prevalence is estimated,

the town's profile suggests a higher prevalence due to its predominantly white population and higher median income.

Figure 3: Binge drinking frequency among adults who binge drink in MA, 2011-2021



Source: Behavioral Risk Factor Surveillance System, 2021

Overview: There is a fluctuating pattern in binge drinking frequency, reports exhibit slight variations over the years, with a peak observed in 2012, 2015 and 2021. This comprehensive visualization underscores the need for targeted interventions and strategies to address binge drinking behaviors within the Massachusetts adult population which could also indicate possible severity of this issue in both Plymouth county and the town of Hingham.

Key Informant Interview Findings

LIST OF KEY INFORMANTS:

- *Hingham Board of Health Member*
- *Disability Council Member*
- *Community Crisis Response Clinician*
- *Hingham Health Agent*
- *Regional Public Health Nurse*
- *Veterans Director*
- *Leader in substance use prevention and treatment*

DISEASE BURDEN

A major concern for the town of Hingham is disease burden, and how it affects the lifestyle and wellbeing of residents. Across all the interviews, informants mentioned a variety of diseases and health factors that they believed posed a problem for the town, including Lyme disease and other tick-borne diseases, type 2 diabetes, heart disease, hypertension, breast and lung cancer, access to healthy food, well water safety, and tobacco use. Breast cancer was particularly concerning for some interviewees due to concerns about lack of access to diagnostic mammograms amid a rising number of cases. Additionally, there were some concerns about access to clean water since some of the town depends on well water for household use. Other environmental health factors, including bacteria levels at the town waterfront, were also raised as issues. Due to the rising number of cases and relatively straightforward prevention measures that can be taken, we focus here and in our Community Health Improvement Plan on the disease burden of Lyme Disease in Hingham.

Because of its tendency to spike in the summertime, Lyme disease is currently the most prominent health issue in Hingham. Lyme disease in Hingham is rising at an alarming rate, with one key informant saying that the number of cases is *“extremely big and concerning.”* However, this could be because of an increased frequency of screening. According to a key informant who works with the Lyme disease data, the data from these tests does not differentiate between *“new cases, symptomatic cases,”* or *“if they have had untreated Lyme for a year and they just happened to get a blood test,”* which makes it challenging to identify disease trends over time.

The urgency of the Lyme disease outbreak has prompted local health officials to host educational sessions and offer more resources, but the buy-in from the community has not been as high as officials would hope. One of the key informants mentioned that they hosted *“a tick education program regionally last month,”* but will be hosting a virtual one in the future because the program did not have a high turnout. They further suggested that making sure resources are available online would expand participation, as it would be more convenient for people to access. Once effective methods of raising awareness on the severity of Lyme disease are identified, it can lead to increased vigilance throughout Hingham, and these methods could then be applied to future public health concerns.

MENTAL HEALTH

In interviews, several people identified mental health as their most significant concern for the health of the town. Though the majority of residents theoretically have access to treatment for poor mental health since they are insured, there is significant stigma about experiencing poor mental health, including depression, hoarding, and suicidal ideation. Informants reported that this is compounded by community pressure to keep up good appearances for oneself and one's family. One person stated *"There is a mental feeling that everyone is happy in suburbia which could be hard if you do not feel like that. People may feel isolated."* Some noted that COVID may have had a positive impact on stigma surrounding mental health, reducing shame for individuals. However, stigma is reported as still being present in the community, along with isolation and a lack of community connection and socialization. This results in decreased participation in potentially helpful community activities. One interviewee noted a reticence in the town to attend mental health-specific events out of fear of other Hingham residents suspecting that they are struggling with poor mental health, stating *"It seems like there is still that stigma that if you show up then there is something wrong with you."*

One issue that came up in several interviews was hoarding as a manifestation of poor mental health, especially since Hingham has an aging population. One interviewee believed that it had become normalized within families since it is a commonplace occurrence generationally. Local health officials have become more adept at doing outreach to individuals with hoarding disorders in the town and complete referrals to the relevant service organizations. Informants shared that though hoarding persists as a significant issue within the community, local officials work hard to ensure that people can access the services they need. Another prominent issue that was discussed is that there seems to be a lack of understanding of what to do in the event of a mental health crisis, with some key informants mentioning how most people defer to calling 911, firefighters, or police instead of 988, social workers, or other mental health professionals. However, underutilization of mental health resources is not the root of the problem - in fact, it was described as quite the opposite.

Many of the interviewees brought up problems around accessibility of care in Hingham and the surrounding towns, such as long wait times, insurance-related difficulties, and the undersupply of mental health professionals which is unable to meet the demand of those seeking outpatient services. One individual noted that there is no full-time social worker in Hingham, and the social workers that are currently involved with the town are *"completely inundated."* To address these accessibility issues, one key informant proposed looking into funding for more mental health clinics and clinicians as well as continuing education for school guidance counselors. Although school-aged youth are not part of our target population, conversations about mental health in school can reach their parents, and thus the greater Hingham community. *"Hingham is an affluent town, so I think because of that patients are better able to access care and are able to pay out of pocket,"* says one key informant. But despite Hingham's high socioeconomic standing, they said they heard *"friends saying 'I am on a waiting list' or 'my kids are on a waiting list' or 'everyone is all booked up.'"*

In contrast, some noted that there is greater access to mental health services now than there has been previously, with new partnerships formed through a local collaborative task force, as well as a clinical social worker situated within the police department to respond to individuals in

crisis in the town. We learned that there is renewed focus on encouraging community participation through outreach efforts to specific communities such as elders and veterans. Coalitions to address mental health have been created, like the Hingham Unity Council, which consists of residents and religious leaders. Select schools and the local library have also shown their support by agreeing to host mental health events on behalf of the Health Department. According to one key informant, having resources like these “*readily available*” will help fight the pervasive stigma against mental health.

ALCOHOL AND SUBSTANCE USE

In interviews, some individuals touched upon substance use involving opioids, stimulants, and marijuana. However, the most common substance that was brought up in interviews was alcohol. Individuals noted its impact on and relationship with the town culture in Hingham, as well as the ways that they say alcohol impacts individuals and families.

Several key informants noted that alcohol use is very common among Hingham residents, especially parents. Alcohol use is normalized both within households and in public at events such as school fundraisers, sports games, and community gatherings, stating “*When I was growing up... you would not see what I have seen, which is parents with Yeti’s [with alcohol] at a 9AM soccer game. I feel like it is getting a bit out of hand... it is also incorporated in so much. If it’s a school fundraiser, there’s alcohol.*” In fact, some informants pointed out that attendance at these events would probably be much lower if alcohol wasn’t provided or allowed. Adults in Hingham are described as being accustomed to drinking in all types of social situations, including with children present, which could lead to these young adults mirroring the unhealthy drinking habits of their parents.

A popular misconception cited by one informant is that since alcohol is legal, it is never harmful. One interviewee noted that alcohol use may be connected to poor mental health, stating “*I think it ties into the loneliness in Hingham. It ties into the ‘I can’t say I need help, but I can drink’. This is a socially acceptable way for me to numb pain or feel cool or feel included. Day drinking is not uncommon here with women at lunches. I see more women in their forties and fifties when their kids are grown and do not know what to do. It seems like there is some self-medicating going on.*” Others also noted that alcohol may be used to self-medicate from the stress of the COVID-19 pandemic, with many populations - including older adults and younger adults - all being impacted. The town’s major industries have been burdened by heavy alcohol use as well, with one key informant mentioning that they’ve seen fishermen in Hingham turn to alcohol when feeling “*financially unstable and stressed*” at their jobs.

In contrast, another interviewee noted that although there is a lot of alcohol use in the town, it is largely responsible, with residents getting Uber rides or having a designated driver if they are planning on drinking outside the home. Additionally, this interviewee noted that one reason for parental alcohol use may be that the social lives of parents and children have become increasingly intertwined. Thus, they suggested, events that may not have been seen as opportunities for parents to socialize in the past are now perceived that way. However, many interviewees shared the opinion that alcohol is an instrumental ingredient in social events in the town, with one person stating “*It is hard to have a party in Hingham that is dry. If you say it is dry it is not going to happen. Keg parties still happen here with adults.*”

Though alcohol use is widespread in the community, there is still stigma around excessive alcohol use or alcohol use disorder. One key informant suggested that the stigma around alcohol use in Hingham may be higher than that of mental health, due to how deeply normalized the drinking culture is. Admitting a problem with alcohol use or seeking rehabilitation services is not something people would discuss openly. According to one key informant, those in Hingham who are sober usually keep their sobriety a secret, possibly because of the shame they think they would experience from others. One interviewee noted that more openness about unhealthy alcohol use may remedy this, stating *“I wish the conversation around alcohol use was more comfortable in families. People could point it out matter of fact, no judgment, ‘Hey you’ve been drinking a lot recently.’ Drinking too much doesn’t mean you’re a terrible person. People don’t know how to address it, they could say ‘your alcohol use may need some attention’ - versus ‘you’re an alcoholic’. People should be asking themselves, ‘is your relationship with alcohol healthy?’”*

Community Health Improvement Plan (CHIP)

Goal 1 – Mental Health: Reduce stigma associated with mental health among Hingham residents			
Objectives	Strategies	Partners and Resources	Partner Notes
<p>1. Increase Hingham resident attendance at public mental health forums by 10 people each forum within the next 2 years</p> <p>2. Implement mental health education content into 2 school events per semester, into 1 Wellness and Beauty business, 2 local churches 2 local town events in the next year (1).</p>	<p>1A. Bi-monthly Mental Health Coalition Speaker Series (Variety of speakers ie. well known BOS athletes, community members, authors, successful business individuals, legislators, suicide survivors, etc)</p> <p>1B. Public campaigns (flyers, posters, QR codes, social media, local media) to spread positive messages about mental health and its impact to challenge stereotypes. (Emphasize that poor mental health struggles can be related to substance abuse)</p> <p>1C. PSA (Reels) of what happens when you call 988 or chat to crisis hotlines. Include PSA's promoting yearly physical health screenings, and importance of air quality on health outcomes.</p> <p>2A. Self care events downtown led by Hingham Downtown Association. Incorporates booths with information, activities, local resources etc.</p> <p>2B. Partner with Sources of Strength to promote a training curriculum and annual event for adults via mental health promotion</p>	<p>Hingham, MA Mental Health Coalition: Patrick O'Connor Massachusetts State Senator (In MH coalition) Patrick.OConnor@massenate.gov</p> <p>Hingham Downtown Association discoverhingham@gmail.com</p> <p>Call 988 Suicide and Crisis Lifeline https://988lifeline.org/</p> <p>Rosemary Byrne -Hingham Board of Health :rosemarybyrne4boardofhealth@gmail.com</p> <p>Sources of Strength (Contact information is through a form on the website)</p>	<p>1A. Hingham Mental Health Coalition: Pro - Local expertise and connections, established network, community trust, unified voice, and shared resources. Con - Bureaucratic processes, Overreliance on the coalition could hinder broader partnerships and community ownership. Representation and Inclusivity: Incomplete representation might lead to initiatives overlooking marginalized perspectives.</p> <p>1B. Hingham Downtown Association: Pro - This association is in charge of many events put on in downtown Hingham. They already have a funding source in place, and the network to put on such events. Con - This association is made up of Hingham Residents therefore there may be hesitation due to stigma surrounding mental health.</p> <p>1C. Call 988 Suicide and Crisis Lifeline Pro-They have specialized expertise in handling immediate mental health crises and can lend credibility to the project. Partnering with them can ensure that accurate</p>

	<p>and prevention of adverse outcomes like suicide, violence, bullying, and substance misuse in collaboration with the advisory committee (<i>Consider Opioid funding</i>).</p> <p>2C. Utilize partnership with local university to hire Macro interns that will curate, facilitate and implement mental health educational content with schools, wellness and beauty businesses, churches and town events; and assist on data collection for a mental health database specific to Hingham</p> <p>2D. Partner with employers to offer mental health training for supervisors and employees, focusing on recognizing signs of mental distress and promoting a supportive work environment.</p>		<p>and more effective information is conveyed in the Reels/PSA, and reach a much wider target audience.</p> <p>Con-Coordinating with a lifeline, such a crisis hotline, may introduce logistical and technical challenges, which can result in slower progress.</p> <p>2A. Board of Health (Rosemary Byrne)</p> <p>Pro- As a resident of Hingham and board member, she would have a better understanding of the town's event planning process and resident's interests when organizing mental health based events surrounding Hingham's needs and interests; access to data and resources.</p> <p>Con- Bureaucratic processes, competing priorities as there may be multiple ongoing initiatives.</p> <p>2B. Sources of Strength:</p> <p>Pro - Already established curriculum and training program for both youth and adults.</p> <p>Con - Costs money, and requires buy in from community members to take part and carry what they learn into the community.</p>
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Goal 2– Disease Burden: Improve Lyme Disease awareness and education in Hingham, MA

Objectives	Strategies	Partners and Resources	Partner Notes
<p>1. Increase the number of Hingham residents aware of how to prevent and check for tick bites by 15% in 3 years (2).</p> <p>2. Increase the number of residents informed on symptoms of Lyme disease by 20% in 3 years</p>	<p>1A. Creating signage for the entrance to trail heads, exists of trails, sports fields, and in outdoor recreation parking lots indicating the best clothing to wear to prevent bites and how to perform self checks for tick bites</p> <p>1B. Encourage local businesses to promote tick prevention strategies</p> <p>2A. Create a booth at the Saturday farmers market that has public health professionals informing the public on the symptoms and risk associated with Lyme disease</p>	<p>Department of Conservation and Recreation tel: (617) 626-1250 Email: mass.parks@mass.gov</p> <p>Hingham Recreation Department tel: (781) 741-1464, email: Info@hinghamrec.com</p> <p>Wompatuck State Park tel: (617) 895-8245, email: Wompatuck.park@mass.gov</p> <p>Intrinsic Provisions (outdoor store in town) https://www.intrinsicprovisions.com/ Tel: 781-385-7154</p> <p>The Trustees Email: worldsend@thetrustees.org Telephone: 781.740.7233</p> <p>Hingham Select Board Phone: 781-741-1451 Contact Form</p> <p>Hingham Farmers Market Website https://www.hinghamfarmersmarket.org/</p>	<p>Department of Conservation and Recreation:</p> <p>Pro- As a State Park Wompatuck signage would need to be coordinated by the Department of Conservation and Recreation</p> <p>Con- A state level organization so may be difficult to contact and coordinate with</p> <p>Hingham Recreation Department</p> <p>Pro-Partnering with the org that manages the land to build a bulletin board at local rec fields (if not already there) to post prevention information</p> <p>Note- Campgrounds and trail heads are also great spaces for signage</p> <p>Intrinsic Provisions (outdoor store in town)</p> <p>Pro-likely interested in Lyme disease prevention</p> <p>Con- No financial incentive to assist</p> <p>Local outdoors businesses won't have financial incentive but will likely be willing to help promote this cause</p> <p>Linked here is a good example of a tick prevention sign</p>

		<p>Public Health Nurses Regional Public Health Nurse, Micayla Bickerton Hingham Public Health Nurse, (781) 783-2617</p> <p>Executive Health Officer: Susan Sami</p>	<p>Hingham Farmers Market Pro- Commonly utilized public event Con - May be difficult to facilitate and incentivize people to volunteer for the farmers market. This may need to be paid for - but could be combined with sunscreen distribution or other PH campaigns.</p> <p>Harbor Media: Local media outlet Pro- This is a local source so community members will have access to it Con- May have small audience and time of air may limit who and when sees the content</p> <p>Hingham Health Department</p>
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Goal 3– Alcohol + Substance Abuse: Transform the perception of alcohol consumption for Hingham residents aged 18-59 to support a reduction in excessive alcohol consumption and the associated negative outcomes

Objectives	Strategies	Partners and Resources	Partner Notes
<p>1. Reduce prevalence of binge drinking among adults in Hingham to below the state rate of 16.2% (3) by December 2025</p> <p>2. Increase 100 town officials, partners and residents' understanding of excessive alcohol use and related consequences by December 2025.</p>	<p>1A. Develop and implement an adult social norms campaign to discourage excessive drinking (4)</p> <p>1B. Increase awareness of mental health and substance use resources via PSAs and messaging</p> <p>1C. Seek funding to increase the number of behavioral health workers for the town.</p> <p>2A. Launch a coalition of town employees, partners, and community members to discuss alcohol use behaviors in the town</p> <p>2B. Identify, develop and implement evidence-based language and framing to engage community members in conversation about alcohol use</p> <p>2C. Research possible incentives to increase community buy-in and participation</p>	<p>Hingham Mental Health Task Force: Taskforce card with contacts https://www.hingham-ma.gov/905/Social-Work-Resources</p> <p>Plymouth Area Substance Abuse Prevention Collaborative: Katelyn McSweeney/Program Coordinator kmcsweeney@hptc.org</p> <p>Opioid Settlement Fund</p> <p>Hingham Cares https://www.hinghamcares.org</p> <p>Substance Abuse and Mental Health Services Administration (SAMHSA) Resource Center https://www.samhsa.gov/resources-search/ebp</p>	<p>1A. The Hingham Mental Health Taskforce consists of six town employees that coordinate substance use and mental health resources.</p> <p>Pro- They can provide knowledge on resources and would likely be willing to partner on community messaging and campaign formation.</p> <p>Con- They are already working at capacity and may not be able to offer additional time and resources.</p> <p>1B. The Plymouth Area Substance Abuse Prevention Collaborative is a nearby tri-town organization.</p> <p>Pro- has organized a “social norming campaign” to reduce drug use and may be able to offer insights and ideas for implementation in Hingham.</p> <p>Con- Their work and campaign targets youth and adolescents so they may not be able to offer insights on an adult-centered campaign.</p> <p>1C. The Opioid Settlement Fund may provide a means of expanding the behavioral health workforce for Hingham</p>

		<p>Pro- Money is already awarded.</p> <p>Con- unclear what restrictions exist on funding and if it can fund staff long-term</p> <p>2A.Hingham Cares is a coalition formed to address substance use among school-aged youth and has an active website and podcast to engage community members. Through collaboration, their work could expand to include the adult population.</p> <p>Pro- Already exist and are known throughout town.</p> <p>Con- May not be interested in expanding focus to include adults.</p> <p>2B. The SAMHSA Resource Center offers evidence-based publications to guide intervention planning such as “Implementing Community-Level Policies to Prevent Alcohol Misuse” and “Community Engagement: An Essential Component of an Effective and Equitable Substance Use Prevention System” .</p> <p>Pro- Evidence-Based</p> <p>Con- Many publications are still directed towards interventions targeting youth populations.</p>
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HEALTH DATA

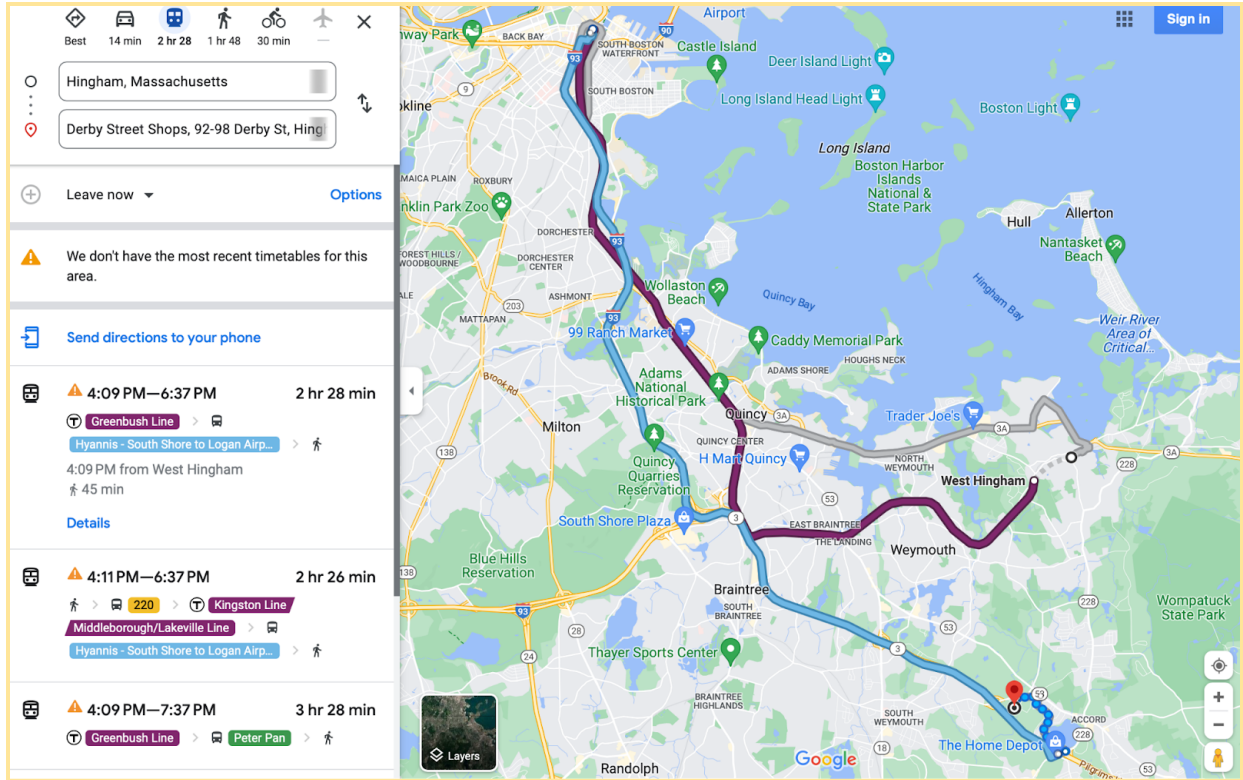
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Appendix A: Environmental Scans

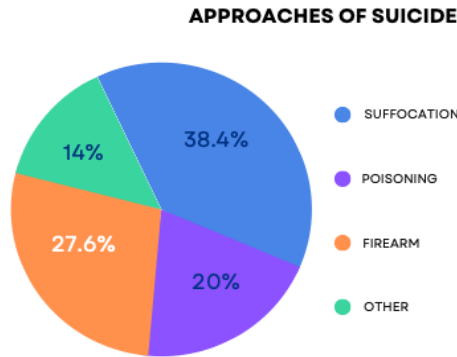
Figure A. Public Transportation from Downtown Hingham, to Derby St.



Source: maps.google.com

Appendix B: Health Data

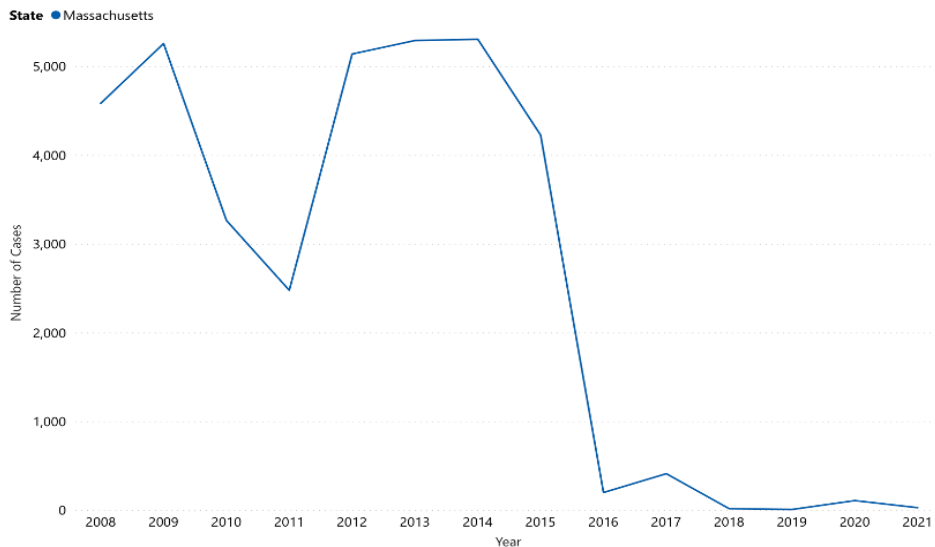
Figure B1. Methods of suicide per 1,000,000 population, Plymouth Co., MA, 2000-2006



Source: Plymouth County, Massachusetts detailed profile - houses, real estate, cost of living, wages, work, agriculture, ancestries, and more [Internet]. [cited 2023 Aug 16]. Available from: http://www.city-data.com/county/Plymouth_County-MA.html

Overview: While these data are from 2000-2006, it is informative to understand the distribution of suicide methods in Plymouth County to guide our understanding of the current context in Hingham. In this older data we see that suffocation was by far the most common method, followed by firearms, poison, and other methods. We understand from key informant interviews that the presence of commuter rail tracks as of 2007 has introduced an additional site of concern regarding suicidal behavior in Hingham.

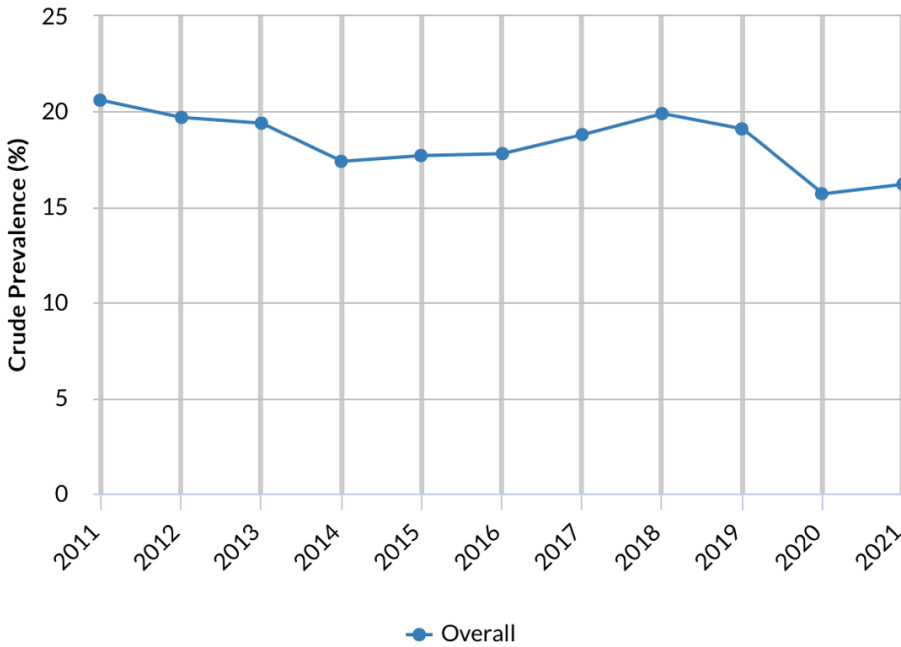
Figure B2: Lyme Disease Trends in the State of Massachusetts from 2008-2021



Source: Surveillance Data | Lyme Disease | CDC [Internet]. 2022 [cited 2023 Aug 16]. Available from: <https://www.cdc.gov/lyme/datasurveillance/surveillance-data.html>

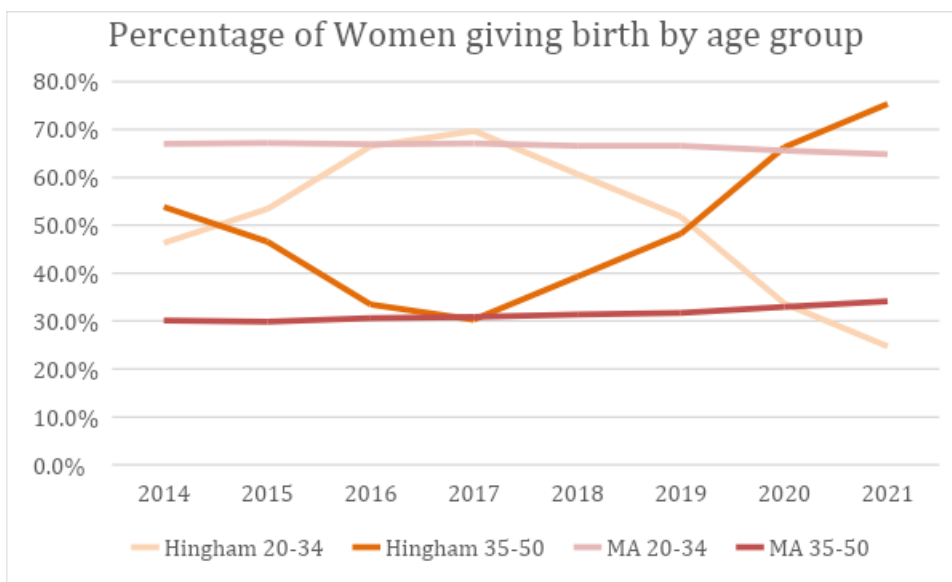
Overview: The depicted pattern showcases a cyclical nature up until 2015. In 2018 there is an artificial decline due to differences in case classification by CDC (positive blood screen + clinical diagnosis) vs MA (positive blood screen alone) (2).

Figure B3. Prevalence of Binge Drinking among MA residents ages 18 and over, 2011-2021



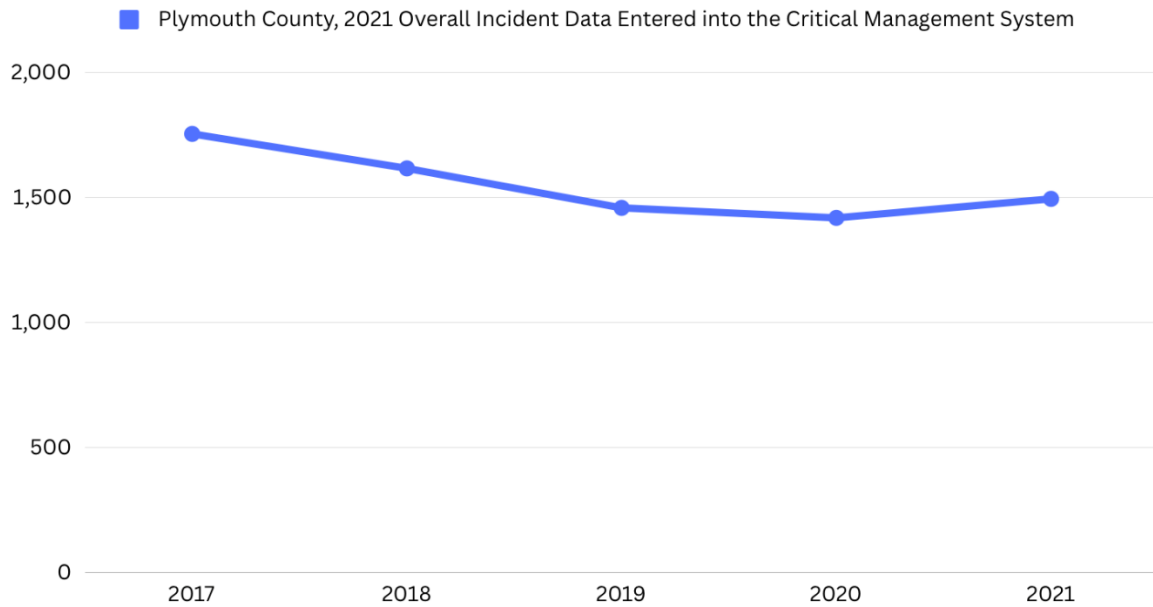
Source: Behavioral Risk Factor Surveillance System, 2021

Figure B4: Percentage of Women giving birth, by age group in Hingham and MA, 2014-2021.



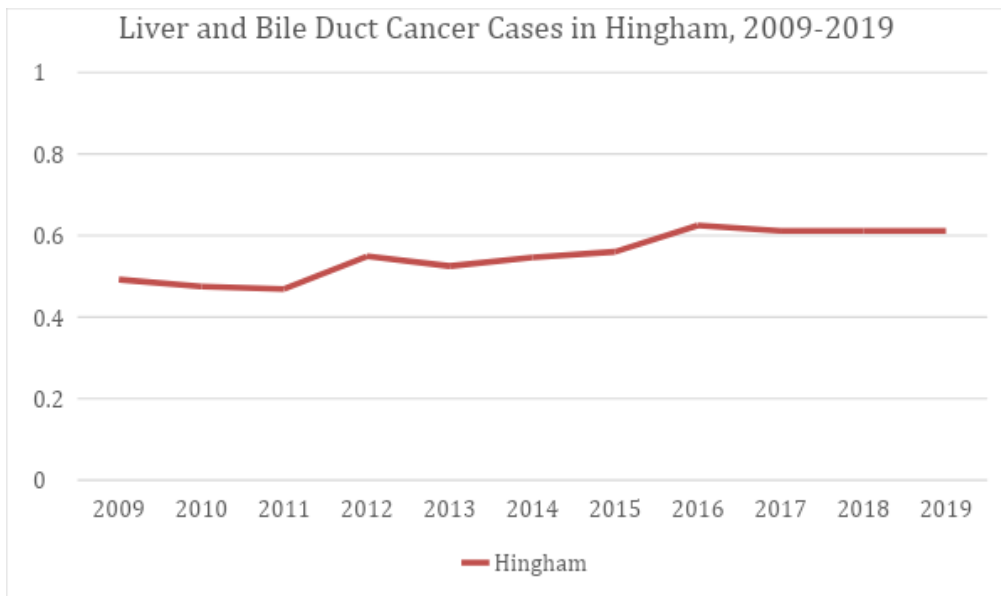
Source: ACS 5-year estimates, US Census Bureau

Figure B5: Overdose Incidents Entered into Critical Incident Management System, Plymouth County, 2017-2021



Source: Plymouth Suicide Outreach – 2021 Annual Report

Figure B6: Liver and Bile Duct Cancer Cases in Hingham, 2009-2019



Source: Synthetic estimates based on state rates

*United States Cancer Statistics - Incidence: 1999 - 2019, WONDER Online Database. United States Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute

^Synthetic estimates based on state rates

Table B1: Incidence Rate (in cases per 100,000) of Breast Cancer Among Females in Massachusetts & Plymouth County, Massachusetts (5-year data average from 2016-2020)

CHARACTERISTIC	Massachusetts		Plymouth County, MA	
	Incidence Rate cases per 100,000	95% Confidence Interval	Incidence Rate cases per 100,000	95% Confidence Interval
ALL	136	134.4, 137.6	142.7	136.9, 148.6
Race/ethnicity				
Asian	95.3	89.8, 101.1	106.7	70.1, 155.8
Black/African American, non-Latinx	121.7	115, 127.9	138.1	119.0, 159.3
Latinx	93.5	88.7, 98.5	106.6	76.5, 144.3
White, non-Latinx	142.1	140.3, 144.0	142.1	136, 148.5
other	*	*	*	*
Age				
<50	51.5	50.1, 52.9	52.6	47.6, 58.0
50+	357.5	352.9, 362.0	378.5	362.6, 395.1

Source: NIH, National Cancer Institute, CDC State Cancer Profile

<https://statecancerprofiles.cancer.gov/incidencerates/index.php?stateFIPS=25&areatype=county&cancer=055&race=00&sex=2&age=136&stage=999&year=0&type=incd&sortVariableName=rate&sortOrder=default&output=0#results>

***Footnote:** The incidence rate (in cases per 100,000) is the recent 5-year trend in incidence rates. The incidence rate is age adjusted for the “All” data and “Race/ethnicity” data but age specific for the “Age” data. The * symbol indicates missing or insufficient data available for rate calculations.

Table B2: Incidence of Lung and Bronchus Cancer among Adults per 100,000, MA & Hingham, MA (2016-2020)

CHARACTERISTIC	Massachusetts*		Plymouth County, MA	
	n	Percent	n	Percent
ALL	5,292		495	
Race/ethnicity				
<i>Asian and Pacific Islanders</i>	1,47	2.7	3 or less	<1%
<i>Black/African American, non-Latinx</i>	212	4	22	4.4
<i>Latinx</i>	154	2.9	6	1.2
<i>White, non-Latinx</i>	4,743	89.6	462	93.3
<i>Other</i>	7	0.8	3 or less	<1%
Age				
<50	118	2.2	11	2.2
50+	5,174	97.8	484	97.8

Sources: State Cancer Profiles > Incidence Rates Table [Internet]. [cited 2023 Aug 17]. Available from: <https://statecancerprofiles.cancer.gov/incidencerates/index.php?stateFIPS=25&areatype=county&cancer=047&race=00&sex=0&age=001&stage=999&year=0&type=incd&sortVariableName=rate&sortOrder=default&output=0#results>

Table B3: Opioid Overdose Deaths in Massachusetts, Plymouth County, and Hingham MA 2015-2022^

Year	Massachusetts	Plymouth County	Hingham, MA
	n	n	n
2015	1,748	174	0
2016	2,110	190	1
2017	2,013	202	1
2018	2,015	151	2
2019	2,005	176	2
2020	2,104	185	2
2021	2,300	167	2
2022	2,357	190	3
Total 2015-2022	16,652	1,435	13

Source: MA Department of Public Health, June 2023

Appendix C: Interview Guide

INTRODUCTION [2 minutes]

Thank you so much for making the time to meet with me today. My name is _____, and I'm a masters student at Boston University School of Public Health.

[If you have a notetaker: I'm here with my colleague _____, who is taking notes so that I can focus on our conversation.]

Purpose of conversation: I'm here today to ask about your observations and insights about the state of public health in Hingham, and where there are opportunities for improvement. We're focused in particular on 18-59 year olds. For this project, we want to understand how things are, and to make recommendations on areas that need attention. I'm excited to learn from you.

Permission to list name: Please know that we will not directly quote you in our report, though with your permission we will include you in our list of key informants. There may be instances where we use an anonymous quote to illustrate a point, but only in cases where it can't be obviously linked to the speaker. Is that alright with you?

Length of interview: We've agreed to spend up to 30 minutes together, and we'll be sure to honor that time limit. As I hope to hear your thoughts on a couple different topics, if needed I may interrupt to make sure we can get to everything.

Permission to Record: With your permission, we'd like to audio record the conversation so that we can be sure to get the details right. If we record, we will permanently delete the recording after we check that our notes are accurate. May we have your permission to record?

[START RECORDING NOW if permission given]

Participant Introduction [1-2 minutes]

1. We'll start with a brief introduction. Will you share:
 - a. your title or role related to Hingham
 - b. what you do within that role
 - c. one of your favorite things about living or working here
2. I'm going to start by asking some questions on topics with which I think you may be most familiar. **[10 minutes]**

Interviewer: Focus on the key informant's primary topic area from table below

<p>Disease Burden</p>	<ul style="list-style-type: none"> ● Among 18-59 year olds, what do you feel is the highest priority health concern in Hingham? How so? <ul style="list-style-type: none"> ○ Probe: What health problem affects daily living the most for people living in Hingham? ○ If substance use or mental health: Anything else you would add to the list of greatest concerns? ● Are there aspects of the town that you've heard are a concern regarding the health of your neighbors or community? This could be anything, including infrastructure, environmental conditions, social life, etc. <ul style="list-style-type: none"> ○ Probe if not discussed: If you're familiar with it, what is your understanding of the town's response to PCB contamination in the old shipyard? Do you have any recommendations in this regard? ● In your opinion, what can the town do to improve or promote overall health for residents? ● If you've noticed any recent changes to overall health in Hingham, whether for better or worse, how would you describe these changes? <ul style="list-style-type: none"> ○ Probe: What do you think are some of the root causes of these shifts?
<p>Mental Health</p>	<ul style="list-style-type: none"> ● In your observation and work with the town, how comfortable do you think people in Hingham are when it comes to discussing mental health? ● Can you tell me about access to mental health services in Hingham? <ul style="list-style-type: none"> ○ Probe: What are potential barriers or facilitators when trying to access mental health services? ● What role do you think local schools, workplaces, and community organizations should or could play in promoting mental well-being? ● What are some of the official ways that the town responds to difficult situations related to mental health? <ul style="list-style-type: none"> ○ Probes: <ul style="list-style-type: none"> ■ From your understanding, how do law enforcement and healthcare systems collaborate to respond to mental health cases in Hingham? ■ How can this collaboration be improved for better outcomes? ● We've learned of evidence that hoarding is a challenge for some in Hingham. In your experience, have you noticed hoarding as a common practice within the Hingham community? <ul style="list-style-type: none"> ○ Probes <ul style="list-style-type: none"> ■ What support systems are available for people? ■ What else is needed on this front?

Alcohol + Substance Use	<p>We are going to start with some more general questions about alcohol and drug use in Hingham, with a focus on 18-59 year olds. We want to clarify that we are talking about “problematic” or “unhealthy” use of substances.</p> <ul style="list-style-type: none"> ● Based on your observations and involvement with the town, can you tell me about alcohol and drug use in Hingham? <ul style="list-style-type: none"> ○ Probes <ul style="list-style-type: none"> ■ What are the primary substances being used? ■ Are there any specific population groups you perceive as the most vulnerable to problematic use? ■ Where and when would you say use is occurring most? ● From your perspective, what has been the impact of alcohol and drug use on this community? <ul style="list-style-type: none"> ○ Probes <ul style="list-style-type: none"> ■ What impact has it had on how people socialize? ■ What consequences have you observed? (Fatal/Non-fatal overdose; car accidents; other) ● What do you think are the key factors that contribute to problematic alcohol and drug use in Hingham? <ul style="list-style-type: none"> ○ Probes <ul style="list-style-type: none"> ■ Culture? Accessibility? Local or state policies? ■ What factors, if any, limit or decrease problematic use of drugs or alcohol? ● What would you recommend as opportunities for intervening or decreasing problematic alcohol and drug use in Hingham? <ul style="list-style-type: none"> ○ Probes <ul style="list-style-type: none"> ■ Existing community strengths ■ Potential partners
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Interviewer: *Do a quick time check now to pace the remaining questions based on time remaining.*

Bright Spots + Facilitators [5-6 minutes]

3. In your opinion, what are some of the bright spots or successful things happening to address these challenges in Hingham?
Probe: What enables the town to provide these services, or for residents to use them?
4. What would you like to see more of in Hingham to support the population health on these challenges?

Gaps + Barriers [5-6 minutes]

5. In your opinion, what are some of the gaps in services or policies or otherwise to address these challenges in Hingham? What’s missing?
6. From your experience and observation, what gets in the way of people making use of the existing resources and services?
Probes: Transportation? Awareness of services? Stigma? Cost?

Open Ended [2 minutes]

7. We’re just about done, but before we end I wondered if you have anything else you want me to know about these topics, or if there’s anything else you think we should be asking about.

Closing

Those are all of my questions. Thank you again for your time, and for sharing your thoughts on all of these topics. I appreciate you sharing your expertise and your time!