#### Introduction

Community Benefits are investments by hospitals that further their charitable mission of addressing their communities' health and social needs – beyond the hospital. Mandated and regulated by the Attorney General's Office (AGO), programs must address health needs reflected in a Community Health Needs Assessment ("CHNA") which is updated every three years. In accordance with the process established by the AGO Community Benefit Guidelines, Anna Jaques Hospital (AJH) engaged various community partners to ensure that varying perspectives on health and social topics were taken into account in order to complete this CHNA.

Members of the Community Benefits Advisory Committee provided leadership, direction, and input, as well as connected AJH to available community data and resources that represents the broad interests of the community to drive the content of the CHNA.

The 2018 CHNA assessment includes high-level summaries of local data reports conducted by area organizations representing low-income and vulnerable populations; an analysis of health indicators and demographics using publicly available data maintained by the US Census Bureau and the MA Department of Health; the Behavioral Risk Factor Surveillance System (BRFSS); and cancer incidences as reported by the Center for Disease Control (CDC).

Previous CHNA reports relied on the collaboration between Anna Jaques Hospital and the Health Partnership (HP) of the Lower Merrimack Valley and Seacoast (previously known as the Community Health Network Area 12 of Greater Haverhill) that conducted a community health needs assessment for the eleven Health Partnership service areas: Amesbury, Boxford, Georgetown, Groveland, Haverhill, Merrimac, Newbury, Newburyport, Rowley, Salisbury, and West Newbury. The assessment evaluated the overall health concerns of residents; identified priority health issues within communities; recommend actions to address priority concerns; and provided information to inform community processes to build strategies to improve the health of each community. Health Partnership did not conduct an updated CHNA in 2018 due to lack of leadership and funding. However, the 2015 CHNA report was compiled using the same existing state data that is available today, thus, this Community Health Needs Assessment includes relevant selections from the 2015 HP report, as well as more currently available state and community data and reports that assess the most pressing health needs in the Greater Newburyport and Haverhill communities.

#### With questions, comments, or to receive a hard-copy of the CHNA, contact:

**Kelley Sullivan,** Manager, Community Benefits; Marketing & Community Relations, <a href="mailto:ksullivan@ajh.org">ksullivan@ajh.org</a> Anna Jaques Hospital
25 Highland Avenue
Newburyport, MA 01950

To view this CHNA report and Implementation plan online, visit:

www.ajh.org/community/outreach-and-involvement

# **2019** Anna Jaques Hospital Community Health Needs Assessment:

- I. Background
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- III. Recap of FY15-FY18
- IV. Methodology & Data Collection
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**Attachment: Health Status Indicators by Community** 



# I. Background

Anna Jaques Hospital is a 123-bed community hospital serving 17 cities and towns in the Merrimack Valley, North Shore and southern New Hampshire border towns. Our mission is to provide the highest quality medical care, wellness and health education to our community, in alliance with our medical staff. Anna Jaques Hospital is recognized for delivering high quality, low-cost community health care with an emphasis on patient satisfaction.

With our mission at the heart of everything we do, Anna Jaques gives back to the community in many ways. From free support groups and parenting classes, to sponsoring community programs such as the Newburyport Farmers' Market or youth sports programs, to offering free emergency services training – Anna Jaques seeks to improve the health of our patients within the walls of the hospital and out in the community. Anna Jaques also spends millions of dollars each year to provide care without charge or at amounts less than established rates to low income patients to ensure that healthcare is accessible.

The Community Benefits Advisory Committee at Anna Jaques Hospital consists of community leaders, and representatives from local health and human service agencies.

# II. Community Benefits Leadership at Anna Jaques Hospital

#### **Community Benefits Advisory Committee**

Comprised of local leaders, representatives from local health and related community service organizations and non-profits, and individuals who are deeply embedded and dedicated to our community, the Community Benefits Advisory Committee (CBAC) – facilitated by the Community Benefits Manager - guides the hospital's involvement and support of events and programs that work to address the most pressing health needs in our region. It is made up of a cross-section of individuals who have special knowledge and insight into the public health needs of our most vulnerable populations, including low-income, minority, homeless, and other underserved or high- risk populations.

Anna Jaques Hospital Community Benefits Advisory Committee supports the transparent process to inform the community of the hospital's Community Benefits mission, activities and programs, and performs a variety of functions to support Community Benefits work including:

- Meets quarterly
- Oversees the triennial Community Health Needs Assessment process
- Oversees the development and implementation of the CB Implementation Strategy Plan
- Reviews the annual Community Benefits Report for the MA Attorney General Office filing

In January 2019, the CBAC and AJH Board of Trustees approved the CHNA and Implementation Strategy.

#### **CBAC Members:**

#### Andrea (Andi) Egmont

Newburyport Youth Services, City of Newburyport, The BEACON Coalition www.newburyportyouthservices.com

- Areas of focus/expertise: reducing high-risk behaviors and substance use in young people, youth programming, asset building, community partnerships
- State-Wide Priorities & Social Determinants of Health: Substance Use; Mental Health; Prevention; Education; Violence; Social Environment
- Community: Newburyport
- **Data:** Andi collaborated in the CHNA by sharing data from their annual Youth Risk Behavior surveys.

#### **Deb Green**

Ovarian Cancer Awareness of Greater Newburyport

#### www.ocawareness.org

- Areas of focus/expertise: Increasing awareness and prevention of cancer, ovarian cancer
- State-Wide Priorities & Social Determinants of Health: Chronic Disease Prevention; Education
- Community: Greater Newburyport

#### **Ilene Harnch-Grady**

YWCA of Newburyport - <a href="http://ywcanewburyport.org/">http://ywcanewburyport.org/</a>

- Areas of focus/expertise: Support and programs for cancer survivors (ENCORE program instructor for cancer survivors); wellness, obesity (fitness instructor)
- State-Wide Priorities & Social Determinants of Health: Chronic Disease Prevention; Mental Health (Survivorship); Education
- **Community:** Greater Newburyport
- (Highlights: YWCA works with every individual and family to ensure affordable access to child care, housing services, and wellness opportunities)

**Data:** CHNA includes data from YWCA's "2017 One Night Homeless Count." John Feehan, Executive Director of YWCA Newburyport, reviewed the CHNA, and shared input on housing issues specific to the Greater Newburyport area.

#### **Tina Los**

Project Coordinator, Essex County Asset Builder Network <a href="http://ecabnetwork.org/">http://ecabnetwork.org/</a>

- Areas of focus/expertise: Substance use prevention; youth development; positive youth assets; community partnerships
- State-Wide Priorities & Social Determinants of Health: Substance Use; Mental Health; Violence; Social Environment; Education
- Community: Amesbury, Georgetown, Newbury, Rowley, Salisbury, Newburyport
- Data: Shared "2017 Youth Asset Report"



#### Pam Palombo, RN

Newburyport Public Health Nurse, City of Newburyport

Nourishing the Northshore, www.nourishingthenorthshore.org

- Areas of focus/expertise: Overall wellness; access to healthy foods for vulnerable populations (Nourishing the Northshore); infant and family wellness
- State-Wide Priorities & Social Determinants of Health: all
- **Community**: Newburyport

#### Officer Dani Sinclair

**Newburyport Police** 

https://newburyportpolice.com/

- Areas of focus/expertise: Substance use; addressing opioid epidemic; safety; youth assets; community partnerships
- State-Wide Priorities & Social Determinants of Health: Violence; Social Environment; Education; Build Environment; Substance Use; Homelessness
- **Community**: Newburyport

#### **Deb Smith**

The Pettengill House

- Areas of focus/expertise: Children and family services; at-risk individuals; intervention; underserved; housing; safety
- State-Wide Priorities & Social Determinants of Health: Social Environment; Housing; Employment; Education; Violence; Substance Use; Mental Health; Homelessness; Chronic Disease Prevention
- **Community**: Amesbury; Byfield; Groveland; Merrimac; Newburyport; Rowley; Salisbury; West Newbury

#### **Shari Wilkinson**

The Newburyport Farmers Market

www.thenewburyportfarmersmarket.org

- Areas of focus/expertise: Access to healthy food; community partnerships
- State-Wide Priorities & Social Determinants of Health: Social Environment; Chronic Disease Prevention
- **Community**: hosted in Newburyport, open to entire community.
- (Highlight: The Market has a weekly farmer who accepts EBT improving access to vulnerable populations)



CB Manager: Kelley Sullivan, Anna Jaques Hospital

With questions, comments or input, contact the CB Manager at: 978-463-1475 or ksullivan@ajh.org.

#### **AJH Community Benefits Leadership Committee**

As part of the updated Attorney General Community Benefits Guidelines: AJH will introduce an Anna Jaques Hospital Community Benefits Leadership Team in FY20 comprised of hospital leaders and staff from a number of different operational groups and backgrounds to support the Community Benefits Implementation Strategy and mission.

Facilitated by the Community Benefits Manager, the AJH CB Leadership Committee provides input and expertise on how best to support and reach community members in need.

#### In addition:

- Meets annually to oversee the development of the Implementation Strategy
- Provides support and input for the triannual Community Health Needs Assessment
- Helps identify local resources or partnerships to support community efforts
- Shares feedback in support of the program as a whole

### Members:

#### **Alison Sekelsky**

Director of Maternal Child Health

- **Focus**: Early development; children & families; substance use prevention specifically for pregnant and parenting mothers
- **Highlight**: Supports the Persist Program through the Birth Center and Women's Health Care; represents AJH in the Pentucket Perinatal Support Group

#### Eileen Pekarski

Patient Navigator, Women's Health Care & Birth Center

- Focus: Substance use prevention; social determinants of health; women; families
- **Highlight**: Manages the free weekly Persist Support Group for pregnant and parenting women in recovery of substance use hosted in Haverhill Medical Offices of Anna Jaques Hospital

#### **Yvette Bailey**

Director of Case Management

- **Focus**: Social determinants of health;
- Highlight: Serves on board of The Pettengill House



#### **Peter Tura**

**Director of Emergency Services** 

• Focus: Overall health; substance use prevention; trauma; social determinants of health

#### **Laura Rossi**

Director of Cancer Services

- Focus: Cancer; survivorship; community partnerships
- Highlight: Supports the efforts of the North of Boston Cancer Resource, focused on cancer survivorship and wellness

#### **Mary Williamson**

Director of Development

- Focus: Community partnerships; healthy living
- **Highlight**: facilitates community partnerships in Haverhill such as the Haverhill Farmers Market; members of the AJH Wellness Committee

#### Marit Pywell, Dietitian

• Focus: diabetes; cancer; obesity; heart health

#### **Senior Management**

Senior Management provides ongoing feedback and expertise in support of Community Benefits programming, with Danielle Perry, Vice President of Marketing and Business Development, providing oversight and leadership to the Community Benefits Manager and overall program.

- Mark Goldstein, President
- Kevin Kilday, Vice President, Chief Financial Officer
- Gail B. Fayre, MD, Vice President, Chief Medical Officer
- Richard Maki, Vice President, Chief Nursing Officer
- Gary Lee, Vice President of Clinical Services
- Shelley DeSimone, Vice President, Human Resources
- Danielle Perry, Vice President, Marketing and Business Development
- Mary Williamson, Executive Director, Anna Jaques Community Health Foundation

#### **Board of Trustees**

The Board of Trustees annually reviews and approves the Community Benefits Implementation Plan and every three years, the Community Health Needs Assessment.

In January 2019, the Board voted to approve the FY19-FY21 Implementation Strategy and FY18 CHNA. After Anna Jaques Hospital officially became part of Beth Israel Lahey Health as of March 1, 2019, the reports were

reviewed and updated to be more descriptive of our outreach efforts and to ensure compliance with 501(R) IRS Regulations and Hospital Revenue Cycle, as well as Attorney General Community Benefit Guidelines. Because of these updates, the reports were re-voted on and re-approved by the AJH Board of Trustees on September 26, 2019.

#### Members:

- David LaFlamme, Chair of the Board, Retired President & CEO, North Shore Bank
- **Grace Connolly**, *Vice Chair of Board*, Attorney and Partner with the Office of Connolly & Connolly. Member Finance Committee
- Ginny Eramo, Secretary of Board, Owner & Creative Director, INTERLOCKS
- Wayne Capolupo, Executive Committee, Chairman & CEO of SPS New England, Inc., Chair, AJH Building Committee
- **Jeff Kirpas**, *Chair*, *Finance Committee*, President, Jeffrey C. Kirpas & Co., P.C.
- Bernhard Heersink, MD, Executive Committee, Ophthalmologist
- Mark Goldstein, President, Anna Jaques Hospital
- Chris Bouton, CEO, Vyasa Analytics
- Michael Costello, Smith, Costello & Crawford, Attorneys at Law
- Frank Cousins, President, Greater Newburyport Chamber of Commerce
- **George Ellison**, Bay State Financial
- Salmon Ghiasuddin, MD, Newburyport Cardiovascular Associates
- Matt Khatib, M.K. Benatti Jewelers
- Byron Matthews, Former Mayor of Newburyport
- Matt Pieniazek, Darling Consulting
- DeWayne Pursley, MD, Neonatologist, Chief, Dept. of Neonatology, Beth Israel Deaconess Medical Center
- Peter Seymour, MD, Colden & Seymour Ear, Nose, Throat & Allergy
- Wilbur Shenk, Retired President & COO of Premix Inc.
- **David Swierzewski, MD**, Seacoast Surgery & Atlantic Vein Institute; President of the Anna Jaques Hospital Medical Staff
- Meg Wiley, Retired, Clinical Research and Customer Service Director, Agamatrix, Inc.

# III. Recap of FY16-FY18

Community Benefit Guidelines require an updated Community Health Needs Assessment every three years and Anna Jaques Hospital, in conjunction with the Health Partnership, completed its last CHNA in 2015 to support FY16 through FY18 efforts and identify healthy priorities.

In 2015, the CBAC voted for FY16-FY18 health priorities to:

- Continue efforts to address: Cancer and Obesity
- Add a new priority (replacing diabetes and cardiovascular health) in response to the statewide opioid epidemic: Substance Use

#### AJH CB Health Priorities Over the Years

- FY2013 FY2015:
  - 1. Cancer
  - 2. Obesity
  - 3. Cardiovascular health
- FY2016 FY2018:
  - 1. Cancer
  - 2. Obesity
  - 3. Substance Use

#### 2016-2018 Implementation Highlights:

#### **Substance Use:**

**Co-hosted the 1<sup>st</sup> Annual Addiction, Prevention & Awareness Month in Newburyport:** City of Newburyport, Newburyport Youth Services/The Beacon Coalition and Newburyport Public Schools partnered with AJH to bring highly respected physician, Dr. Ruth Potee, to present a CME to 80+ medical professionals and community events for parents, students and teachers.

Also in March 2016, AJH hosted a two-day panel discussion at Newburyport Five Cents Savings Bank for employees to learn more about warning signs and how to find help for friend and family struggling with drug addiction.

**Essex County Asset Builder Network:** AJH supported the acquisition of a database that would track overdoses between communities and allow for a more cohesive, multi-agency, approach to connecting individuals with the assistance that they need and the services available in the area.

Dr. Jamie Morse, Chief of Emergency Medicine, participated in a panel discussion for business community entitled "Addiction in our Workplace" hosted by the Essex County Asset Builder Network.

#### **Obesity:**

Yankee Homecoming Waterfront Workout Series sponsored by AJH:400+ people participated in the Free Waterfront Workout Series hosted by Anna Jaques during Newburyport Yankee Homecoming. Participating gyms included: CrossFit Full Potential; Fuel Training Studio; Guy Chase Martial Arts; Latitude Sports Club; Motivate; Natural High Fitness Club; Riverside Yoga; Yoga Center of Newburyport; YWCA of Newburyport.



#### **Newburyport Farmers' Market:**

- AJH co-sponsorship supported: 40 markets a year; 1,500+ attendees per market; 35+ vendors and 50% local farms;
- Supported efforts to spread the word that Farmer Dave takes EBT and Snap vouchers accepted at the Market for lower-income families

**Promoting Physical Activity**: AJH sponsored and participated in many events to promote physical activity among key populations such as: Northern Essex Community College Campus Classic 5k (hosted in Haverhill, documented to have heightened reports of childhood diabetes; as well as lower income families); Tri for the YWCA Triathlon; Seacoast Running Festival; Yankee Homecoming Waterfront Workout Series; Salisbury Parks & Recreation's Tortoise & the Hare Race (with proceeds to benefit Salisbury public parks)

#### Cancer:

#### **Breast Cancer Awareness Month Efforts:**

- AJH distributed 25,000 mammogram reminder coffee sleeves to local shops
- Hosted the annual "Pink Up the Port" campaign to encourage local businesses to incorporate pink and breast cancer awareness into the workplace
- AJH and Institution for Savings co-hosted "Celebrating Survival" with special guest speakers, playwright Lisa Rafferty, Sue Tabb of MAGIC 106.7, and Dana Marshall of 92.5 the River and raised close to \$5,000 for the Gerrish Breast Care Center.

Annual Free Screening: Head & Neck Cancer held annually during its awareness week in April.

#### Support of Local & Regional Efforts, including:

- Greater Newburyport Ovarian Cancer Awareness (GNOCA)
- North of Boston Cancer Resource: provides an online directory of healing therapies and programs available in the area; partner efforts with AJH Cancer Center
- Continue to expand efforts during Breast Cancer Awareness Month (mammogram reminder campaign; Pink Up the Port; Celebrating Survival) to all communities like Newburyport, Haverhill, Amesbury, Salisbury



# IV. 2019 CHNA Methodology & Data Collection

Primary data for the Community Health Needs Assessment is derived from shared resources and available data from community partnerships and organizations. Members of the CBAC collaborated with the CB Manager, through meetings and conversations between 2018 - 2019, to connect AJH with useful resources and reports, both from members' own organizations as well as publicly reported data, that reflects the significant health needs facing communities served by Anna Jaques Hospital.

The members of the CBAC represent the interests of AJH's most vulnerable populations, including low-come, minority, homeless, and other underserved or high- risk populations. Additionally, Pam Palombo, a member of the CBAC, serves as Newburyport Public Health Nurse, and provided insight and suggestions to the CBAC regarding the health needs of that community.

Demographic data was collected using publicly available data from the U.S. Census Bureau, health indicators from the MA Department of Health, and the Center for Disease Control and Prevention (CDC). Health indicator data such as mortality, incidence, prevalence, and hospitalization rates were provided by the Massachusetts Department of Public Health, and by using other state, regional and national information sources on cancer incidence and opioid use trends. Summaries of the organizations that provided primary data and the communities and populations they serve, include:

- YWCA of Newburyport: is dedicated to eliminating racism, empowering women and promoting peace, justice, freedom and dignity for all. For over 135 years of service to the community, it has provided for community members regardless of race, gender or economic reality. Support is offered to women and their families through programming that addresses their health and wellness, aids in the development of job skills and provides access to affordable housing and childcare programs.
  - o **Communities served**: Newburyport, Amesbury, Salisbury
  - State-Wide Priorities & Social Determinants of Health YWCA supports: Homelessness; Housing;
     Built Environment; Employment; Violence; Chronic Disease (YWCA offers affordable gym); Social Environment
  - Link to YWCA's "2017 One Night Homeless Count" data in CHNA report.
- <u>Pennies for Poverty</u>: mission is to ease the impact of poverty on the people of Greater Newburyport by
  endorsing models of assistance that promote dignity, supporting allied organizations both financially
  and collaboratively, increasing community awareness of poverty through citizen education, and inspiring
  and encouraging volunteerism.
  - o **Communities served**: Greater Newburyport
  - State-Wide Priorities & Social Determinants of Health YWCA supports: Education; Built Environment; Social Environment; Prevention; Mental Health
  - o Link to Pennies for Poverty's public data in CHNA report.
- Our Neighbor's Table: ONT's innovative approach to food assistance is aimed at providing flexible, personalized programs to individuals and families living in northeastern Essex County. ONT provides

groceries, fresh foods, and toiletries to more than 500 households from 12 cities and towns a week across 4 market locations, and deliver groceries and hot meals to home-bound individuals in 3 towns. Each holiday season, we distribute special groceries and turkeys to more than 700 families. With 24/7 emergency hotline for food.

- Communities served: Amesbury, Boxford, Byfield, Georgetown, Groveland, Merrimac, Newbury, Newburyport, Rowley, Salisbury, South Hampton, and West Newbury.
- State-Wide Priorities & Social Determinants of Health YWCA supports: Social Environment;
   Homelessness; Chronic Disease; Prevention
- o Link to Our Neighbor's Table's 2017 public annual reporting data in CHNA report.
- <u>Essex County Asset Builder Network (ECAB)</u>: creates regional connections and supports for individuals, families and organizations using a positive youth development approach to help youth thrive. *Link to data in CHNA report*.
  - o Communities served: Amesbury, Georgetown, Newbury, Rowley, Salisbury, Newburyport
  - State-Wide Priorities & Social Determinants of Health YWCA supports: Substance Use;
     Education; Social Environment; Mental Health; Prevention
  - o Link to Essex County Asset Builder Network's "2017 Youth Asset Report" in CHNA report.

**Note**: Anna Jaques Hospital received no written input or comments to the 2015 CHNA or Implementation Strategy. Both documents were made available on the AJH website with language inviting feedback and soliciting public comment.

# V. <u>Executive Summary</u>

Data in this report builds upon the 2015 Health Partnership Community Health Needs Assessment with updated information from sources including: Massachusetts Department of Education, Massachusetts Department of Public Health MassCHIP database, 2017 Youth Risk Behavior Survey (YRBS), Massachusetts Department of Public Health state data, partner resources and data, focus groups, media coverage, community input and evolution of available area programs.

#### Demographics:

Anna Jaques Hospital serves CHNA 12, also known as the Greater Haverhill Area. The cities and towns that make up this geographical area include (2017 Census data):

- Haverhill (63,639)
- Newburyport (18,060)
- Amesbury (17,218)
- Salisbury (9,400)
- Georgetown (8,688)
- Newbury (7,079)
- Merrimac (6,913)
- Groveland (6,697)
- West Newbury (4,545)
- Rowley (1,416)

According to the 2017 Census, the Greater Haverhill/Health Partnership area has an estimated population of 148,562. The three largest communities in the region are the cities of Haverhill (63,639), Newburyport (18,060), and Amesbury (17,218). The smallest communities are the towns of Rowley and West Newbury. All communities experienced a growth rate within the decade except Salisbury with a negative one percent drop in total population.

# Greater Haverhill Area At-A-Glance Race/Ethnicity

92% non-Hispanic white 5% Hispanic 1% non-Hispanic Black 1% Asian

#### Age

Newburyport had the oldest population: Ages 65+ account for 14% Merrimac has the youngest population: 30% under 20 years of age

# **Poverty**

6.4% overall. Haverhill highest at 9%.

Merrimac lowest at 2.7%

Unemployment Rates

Salisbury – highest at 10.2%

\*2010 data

The population data by race in 2010 shows a majority of the population is 91 percent White, 7 percent Hispanic, 1 percent Asian, and 1 percent Black. The city of Haverhill has a substantial Latino population compared to the other communities. Population by age provided insight to age- related concerns that might be pertinent to the entire Health Partnership. Three-quarters of the population of the Health Partnership were over the age of 19 in 2010.

See attachment for **Health Status Indicators by Community.** 

According to Blue Cross Blue Shield's Health Index Map, Essex County falls between the middle of "less health" and "healthier" with conditions most impacting the area including: major depression; hypertension; high cholesterol; and coronary artery disease (see chart below).

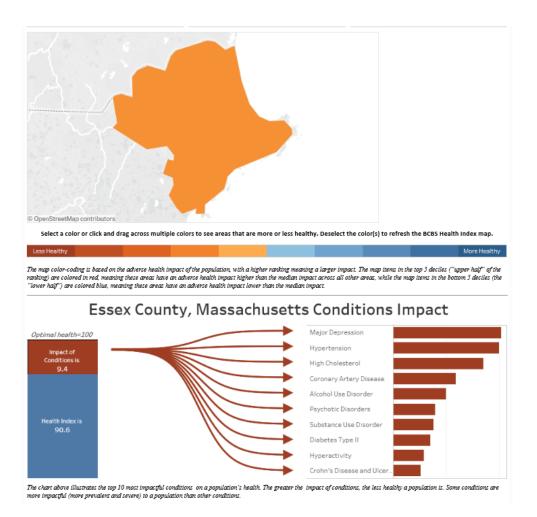


Figure 1 BCBS Health Index Map. https://www.bcbs.com/the-health-of-america/health-index/national-health-index

#### Health Partnership (CHNA 11) 2015 Community Health Needs Assessment

While the Health Partnership did not conduct an updated CHNA in 2018 due to lack of leadership and funding, the 2015 report includes much of the same existing state data that is available today, and more importantly, includes meaningful survey responses, key informant interviews, and focus group feedback that reflects the most health needs in the Greater Newburyport and Haverhill communities. Thus, this 2018 report includes a high level overview:

The Health Partnership (HP) of the Lower Merrimack Valley and Seacoast report summarizes the major findings from our community health needs assessment. Primary data collection included a total of 231 surveys (58 paper copies, 173 online tool), 21 key informants, 2 focus groups with a total of 15 participants, and secondary data sources that included demographic and public health data.

The major health issues that were identified in the surveys, focus groups, interviews, and supported by public

health data include drug and substance use, mental health, oral hygiene, and homelessness. The majority of mental health issues include substance abuse (specifically heroin and opioids), depression, anxiety, and suicidality. The residents identified at greatest risk for these health issues include the elderly, youth, and low income or unemployed individuals.

Key barriers to obtaining healthcare include transportation, access to available resources, affordability, insurance coverages, inadequate services, lack of healthcare providers, and language barriers. Transportation was the largest concern throughout all communities in the Greater Haverhill area. According to survey respondents, inadequacies in the following services have been identified: school health personnel, mental health providers and services, providers who accept MassHealth, treatment and recovery services, inability to receive timely appointment, availability of providers on evenings and weekends, lack of cultural and linguistically appropriate services, and access to primary care.

What are the top 5 health issues in your community?

Top 5 Answers	Percent	# of Responses
Drug/Addiction Use	54%	123
Mental Health	45%	103
Overweight/Obesity	45%	103
Cancer	38%	87
Alcoholism	37%	84

Indicators of health status based on public health and other secondary data are presented for the CHNA 12 of Greater Haverhill and Massachusetts on the following topics: access to health, asthma, chronic disease, diabetes, general health status, heart disease, high blood pressure, high cholesterol, obesity, oral and pharynx cancer, physical activity, servings of fruits and vegetables a day, and substance use.

Health status indicators according to Massachusetts Department of Public Health data for each of the eleven Health Partnership cities and towns include the following topics: demographics, perinatal and child health, infectious disease, injury, chronic disease, hospital discharge for primary care manageable conditions, and substance use.

Key recommendations provided by the survey respondents, focus group participants, and key informants to improve the health of residents in each community include extending evaluation and treatment plans for users of substances; provide increased training on behavioral and mental health first aid; increased education on prescription drugs; organize support groups and outreach education at a centralized location for youth and elders; provide outreach and education to communities in the Health Partnership on MassHealth enrollment options; partner with health agencies and homeless shelters to develop a plan for the homeless during winter; and encourage partners to provide culturally and linguistically appropriate services to respond to the needs of the demographics in the community, e.g. Hiring interpreters

Figure 2 What do you identify as the top 5 health issues in your community? (Answered: 229, Skipped: 2)

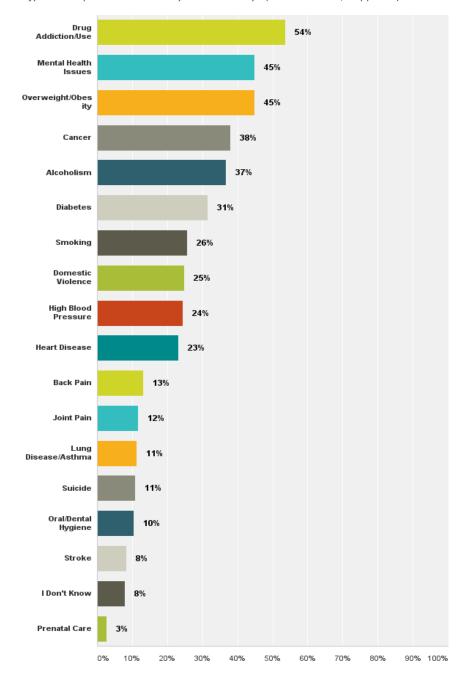


Figure 3 \*Health Partnership Community Health Needs Assessment 2015

#### VI. Social Determinants of Health

Significant changes in health care have underscored the continued value of Community Benefits (CB) programs and the need to update the guidelines. In the last decade, evidence has made it increasingly clear that the utilization of medical services is not the primary determinant of community health. Rather, *the social conditions in which people are born, grow, live, work, and age play a key role* in determining health outcomes and health disparities.

# WHAT DETERMINES HEALTH?

(ADAPTED FROM MCGINNIS ET AL., 2002)



Figure 4 https://bluecrossmafoundation.org/sites/default/files/download/publication/Social\_Equity\_ExecSumm\_final.pdf

# Highlights that impact SDOH in our Community:

- Homelessness: The <u>YWCA Greater Newburyport conducted the One Night Homeless Count</u> on Wednesday, January 26, 2017. The goal of the count was to raise awareness of homelessness within the community, as well as to supply HUD with information about the population of homeless individuals in Newburyport, Newbury, Rowley, Salisbury and Amesbury. Key findings:
  - Number of homeless children continues to grow according to school district data. In 2013 the number was 291 and in 2017 it was 333
  - The 2016 report reported that homeless was on the rise within all five communities compared to 2015
  - 2016 count also reported that the 18+ category rose from 87 in 2015 to 193 in 2016

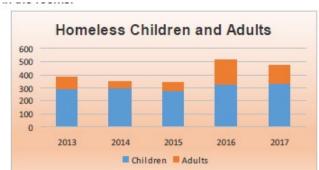


Figure 5 Source: YWCA "One Night Homeless Count" 2017

 Poverty: (As reported by Pennies for Poverty Newburyport): Poverty impacts many in our local community. The chart below reflects data for the communities of Newburyport, Amesbury, Salisbury, Newbury, West Newbury and Rowley. It makes clear that, despite the impression of affluence in our area, many are struggling with poverty and many of those are children

As shown, in the six towns served by Pennies for Poverty, from four to 12% of the population live in poverty, as defined by the federal government. That definition doesn't take into account the costs of today's healthcare, housing and other essentials so the true rate of poverty is much higher

	Population	Percent of total population living in poverty	HORSEST STREET, STREET	Percent of persons living in poverty (age 3+) enrolled in school
Amesbury	15,806	4%	4%	13%
Newbury	6,619	5%	5%	30%
Newburyport	16,745	7%	7%	31%
Rowley	5,856	4%	9%	56%
Salisbury	8,264	12%	8%	24%
West Newbury	4,239	9%	8%	54%
Total across service area	57,529	7%	7%	35%

Figure 6 Source: 2015 American Community Survey

Food Insecurity: (As reported by Our Neighbor's Table):
 According to data compiled by The Greater Boston Food Bank and Feeding America, there are approximately 6,000 people who are food insecure living in northeastern Essex County – people who are worrying about running out of food or actually going without.

More than 2,500 of those people live in Amesbury and Newburyport combined, but there are children, adults and seniors struggling with hunger in every one of the twelve communities served by ONT.

In 2017, Our Neighbor's Table served 3,500 neighbors nearly 3,000 people received food from ONT's grocery and meal program

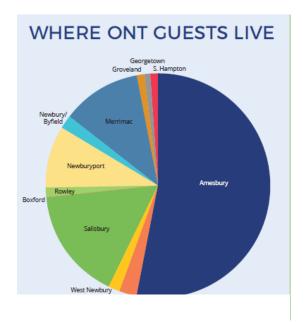


Figure 7 Figure 6: Our Neighbors Table 2017 Annual Report



children	seniors	veterans	full-time workers	retirees
892	504	148	304	424

Figure 8 3,500 served in 2017; Source: ONT 2017 Annual Report

# VII. Community Reporting & State Data

Youth: Greater Newburyport/Haverhill Communities & Across Massachusetts

#### Essex County Asset Builder Network - Youth Asset Report 2017:

The Essex County Asset Builder Network (ECAB) creates regional connections and supports for individuals, families and organizations from Amesbury, Georgetown, Newbury, Rowley, Salisbury and Newburyport, in using a positive youth development (PYD) approach to help youth thrive.

PYD is an intentional and proactive approach that engages young people in a way that empowers strengths. It is also used as a prevention approach to encourage healthy decisions. The ECAB utilized the 40 Developmental Assets®, as defined by the Search Institute, which builds upon 40 positive qualities young people can have in their lives as research shows that the more assets a young person has, the more likely they are to be healthy and to face adversity.

The data below is from the ECAB's 2017 administration of the Search Institute's *Profiles of Student Life:* Attitudes and Behaviors survey of student's grades 6-12 in the Amesbury, Georgetown, Newburyport and Triton school districts. The percentages listed indicate the number of young people who report experiencing that asset:

- While "Family Support" is high (84%), "Parent Involvement in School" (37%) and "Positive Family Communications" is much lower (39%)
- Community Values Youth Young person perceives that adults in the community value youth.
   30%
- Youth as Resources Young people are given useful roles in the community. 39%

Haverhill High School Focus Group with Health Partnership 2015: high risk of substance use and abuse, gang related activity, and mental and behavioral issues such as depression, anxiety, cutting, and suicide; Youth begin experimenting with tobacco/vaping and marijuana in high school; youth find outlets within the gang community describing it as "family" when their immediate family is not there for them.



Depression among youth has increased and has led to cases of suicidality and self-inflicted wounds, such as cutting because of bullying and cyber bullying in and out of the school system.

#### Violence Intervention Prevention program students at Haverhill High School

The Violence Intervention and Prevention program is made up of students at Haverhill High School who serve as teen advocates who mission is to address all forms of violence through community collaboration, training and education, prevention, and outreach. A total of 12 students participated in the focus group. The discussion topics included: bullying, teen dating violence, gang-related violence, depression and anxiety, suicidality, and substance use.

- The students observe bullying beginning in the middle school level and it carries over to the high school level. The types of bullying mentioned frequently was cyber bullying through social media outlets such as Facebook and a form of texting involving called sexting.
- Social media has made reaching the suppliers of substances much more accessible and hard to trace.
- Teen dating violence and partner violence is often seen among young couples inside and outside of school. Students describe a friend or someone they have seen in school become overprotective, controlling, and display signs of jealousy in a relationship. They all have highlighted issues around domestic violence.
- Marijuana is the gateway drug at Haverhill High School. The students mention they smell "weed in the bathroom" and even seeing their peers come to school "high."
- There are several gangs at Haverhill High School. The gang related activity occurs mainly outside of the school perimeters. The VIP students describe the need for increased youth employment. Without responsibilities, the youth often turn to gang related activity.
- Depression among high school students is prevalent and the students mention it leads to isolation, cutting, and suicidality.

The Violence Intervention and Prevention students describe how there is a big disconnection between Haverhill High School and its collaboration with agencies for counseling and behavioral and mental health services. They express their desire to have younger, more relatable guidance counselors and providers who can provide more clinical support for the issues described above. They also expressed the desire for assistance in financial planning, how to apply for credit cards and loans, and added support for seniors applying to college.



#### **Across Massachusetts:**

As reported in the Massachusetts Health Council's 2017 Report on Preventable Conditions and Social Determinants of Health, Common Health for the Commonwealth:

The report identifies several troubling trends that impact the health of school-age children:

- 60% of students drank a sweetened beverage daily with middle school students slightly more likely to consume them than high school students. High school students, however, were less likely to consume multiple servings of vegetables and fruits than middle school students.
- Massachusetts is a leader in access to health coverage but due to multiple factors, including high out-of-pocket costs, access to care is a persistent challenge for those with chronic health conditions or low incomes.
- Smoking rates among high school students have fallen dramatically over the past decade, but electronic products have largely replaced cigarettes. When vaping is included, it appears there has not been a reduction in nicotine use among high school students.
- Rates of major depressive episodes among adolescents have trended up recently in both Massachusetts and the United States, with 11% of Massachusetts adolescents reporting a major depressive episode in 2013–2014.

#### 2015: Health & Risk Behaviors of Massachusetts Youth

The report surveyed: 59 public high schools randomly selected; 87 middle schools; 9,185 total students who participated from grades 6-12 both voluntarily and anonymously. While there were many positives reported, the negative key findings are helpful to determine areas to focus on and improve, which include:

- Some youth risk behaviors and health-related factors have worsened significantly since 2013: indicators including: mental health, teen dating violence, motor vehicle safety, nutrition, physical activity and sexuality education
  - More high school students in 2015 compared to 2013 reported feeling sad or hopeless for more than two weeks (27% vs. 22%), texting while driving (39% vs. 32%), talking on a cell phone while driving (47% vs. 39%), initiating violence against someone they were dating (2% vs. 1%), and engaging in 3 or more hours of video/computer games per day (43% vs.39%).
  - Fewer high school students in 2015compared to 2013 reported eating breakfast daily (35% vs. 40%) and being taught about HIV/AIDS in school (80% vs. 84%).
  - Among middle school students, more students in 2015 compared to 2013 reported playing 3or more hours of video/computer games per day (42% vs. 36%).
- Some important risk areas remain statistically unchanged since 2013: most notably related to opioid and prescription drug use, cyber-bullying, alcohol use and nutrition and weight

- Among middle and high school students, and binge drinking in the past 30 days (2%) in reported percentages of cyber-bullying in the 2015 as in 2013. past year (middle school: 15%, high school
- Among high school students, being bullied at 13%) and obesity (middle school: 9%, high school in the past year (16%), being physically school: 11%) in 2015 are statistically equivalent hurt by someone they were dating (9%), to those reported in 2013. carrying a weapon in the past month (13%)
- Among middle school students, similar using alcohol or drugs before last intercourse percentages were reported for intentionally (22%), and having ever used marijuana (41%) hurting one-self without wanting to die in the remain unchanged between 2013 and 2015. past year (16%), drinking one or more sugar-sweetened beverages in the past day (52%)

#### **Analysis of Secondary Data Sources**

Most population health data were accessed through the MassCHIP database. We used the data to provide an overview of health status of residents of the Health Partnership area network and Anna Jaques Hospital's service territory. Data is mostly presented using graphs and charts. Generally, the most important health determinants were based on findings from focus groups and key information interviews. Other secondary data sources included local governmental reports as well as local research and media coverage.

#### Analysis of Massachusetts Department of Public Health (MDPH) Data

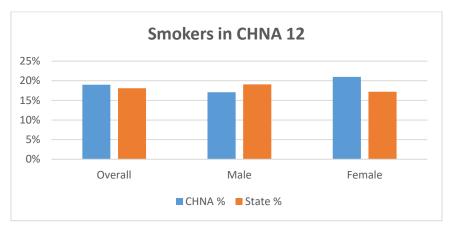
*Physically and mentally*: the general health of the Greater Haverhill CHNA 12 is comparable or better than the state average across all categories.

Chronic Illness: Across nearly all categories reported – including incidence of diabetes, heart disease, high blood pressure, high cholesterol, asthma, disability and arthritis – the Greater Haverhill CHNA 12 is comparable or better than the state average. Only adult asthma shows a slightly higher incidence rate than the state average.

Risk Factors and Health Behaviors: For most categories reported—including binge drinking, obesity, physical activity, 5+ servings of fruits and vegetables a day — the Greater Haverhill CHNA 12 is comparable or better than the state average.

In three categories – smokers, overweight, and flu vaccination – the Greater Haverhill CHNA has higher rates than the state average. The number of smokers (specifically among female adults) is of concern, particularly as it correlates to the higher incidence of lung cancer in our service area.

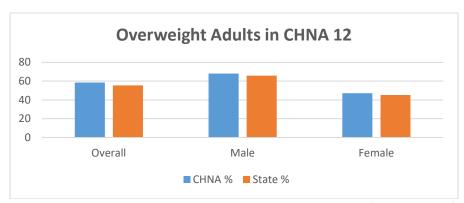
# Smoking Smokers in CHNA 12



\*MDPH Data from 2002-2007

Percentage of smokers is slightly higher than the state average overall, and notably higher for women.

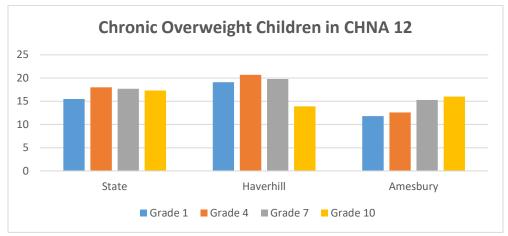
# Obesity



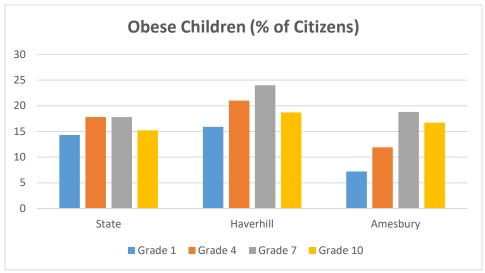
\*MDPH Data from 2002-2007

Percentage of overweight adults is higher than the state average.

2019 Community Health Needs Assessment



\*MDPH Data from 2002-2007



\*MDPH Data from 2008-2009

In Haverhill, overweight and obese children is of concern in all grades. In Amesbury, obese children is of concern in middle school and high school.

#### Cancer

Cancer is the second leading cause of death in the United States, exceeding only by heart disease. One of every four deaths in the US is due to cancer (CDC). According to the American Cancer Society, in 2019, in the United States, there will be an estimated 1,762,450 new cancer cases and 606,880 cancer deaths per year.

In Massachusetts, deaths due to all cancers are slightly higher than the state average. Lung cancer deaths are higher than the state average overall, and significantly higher in Merrimac, Salisbury, Haverhill and Amesbury.

#### Across Massachusetts:

Estimated new cases, Estimated deaths, 2019 Incidence rates, 2011-Death rates, 2012-2016 2019 2015 12,420 **156.3** 40,020 Average annual rate per 100,000, age adjusted to the 2000 US Average annual rate per 100,000, standard population. Rates for PR age adjusted to the 2000 US are for 2011-2015. standard population.

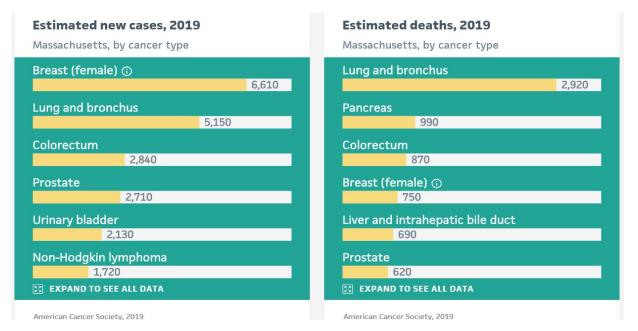


Figure 9Figure 9 American Cancer Society; https://cancerstatisticscenter.cancer.org/#!/state/Massachusetts

### In Essex County:

Cancer DEATHS Per 100,000	CHNA 12	State	Merrimac	Salisbury	Haverhill	Amesbury
Total Cancer	177.9	177.4	217.9	310.2	185.5	200.0
Lung Cancer	55.1	49.4	91.0	66.9	64.1	71.5

#### Behavioral Risk Factor Surveillance System (BRFSS) - Details on Cancer

BRFSS is a continuous multimode survey of adults ages 18 and older and is conducted in all states as a collaboration between the federal Centers for Disease Control and Prevention (CDC) and state departments of public health.

All percentages in this report are weighted to represent the total Massachusetts population in 2016. *Highlights of the 2016 report:* 

#### **Chronic Health Conditions - Cancer**

In 2016, 11% of Massachusetts adults reported that they had ever been diagnosed with cancer.
 Among those 75 years of age and older, the prevalence of cancer survivors comprises 35% of all residents. White adults were more likely than Hispanic adults to have ever been diagnosed with cancer.

#### **Cancer Screening**

- One in four adults ages 50-74 reported they did not meet the US Preventive Services Task Force (USPSTF) recommendation for colorectal cancer screening.
- 86% of females ages 50-74 reported having a mammogram in the previous two years.
- 84% of females ages 21-65 without a hysterectomy reported having a pap smear in the previous three years; however, among those 21-24 years of age, this was only 59%. Asian females were less likely than White females to report having a pap smear in the previous three years.

#### **Substance Use**

As reported by the National Institute on Drug Abuse, Massachusetts ranked among the top ten states with the highest rates of drug overdose deaths involving opioids. In 2017, there were 1,913 drug overdose deaths involving opioids in Massachusetts—a rate of 28.2 deaths per 100,000 persons, which is twofold higher than the national rate of 14.6 deaths per 100,000 persons.



# **Number of Opioid-Related Overdose Deaths, All Intents** by County, MA Residents: 2000-2017

Massachusetts Department of Public Health

POSTED: FEBRUARY 2019

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total 2000-2017
Barnstable	12	19	21	15	17	20	24	31	22	21	20	19	24	43	53	66	81	67	57
Berkshire	2	3	1	2	6	9	1	8	3	8	4	9	18	22	29	33	36	27	22
Bristol	38	58	66	84	72	78	85	64	84	70	79	82	95	116	146	168	243	243	1,87
Dukes	- 1	0	- 1	0	- 1	2	0	- 3	- 1	2	0	0	0	- 1	- 5	7	- 3	2	2
Essex	51	65	55	81	68	80	87	89	65	74	51	57	94	119	209	231	273	311	2,06
Franklin	5	2	- 1	5	3	4	6	4	2	2	- 6	6	8	10	- 11	18	14	9	- 11
Hampden	32	37	42	46	32	36	46	38	48	46	48	45	59	69	64	96	129	113	1,02
Hampshire	5	5	5	12	8	3	10	14	11	10	12	10	11	30	26	16	36	28	25
Middlesex	64	86	92	115	105	122	118	110	112	124	94	130	122	155	273	333	401	357	2,91
Nantucket	0	1	0	0	0	0	0	1	0	1	1	0	0	1	1	1	2	3	1
Norfolk	29	42	44	43	40	53	49	54	73	65	60	64	71	83	127	161	212	170	1,44
Plymouth	23	25	29	47	28	38	49	52	48	53	41	67	57	86	110	168	188	205	1,31
Suffolk	49	87	98	106	83	66	107	103	74	95	64	85	91	111	145	195	239	255	2,0
Worcester	68	75	71	58	51	63	74	71	78	67	80	82	91	115	162	216	242	264	1,9
Total Deaths	379	506	526	614	514	575	660	642	622	638	560	656	742	961	1,362	1,710	2,099	2,056	15,8

- ical Notes

  Data for 2017 deaths are preliminary and subject to updates. Case reviews of deaths are evaluated and updated on an ongoing basis. A large number of death certificates have yet to be

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  Numbers and calculations based on values less than 5 are suppressed for years in which the death file is not yet closed if they are based on pending cases.

  Please note that some totals may not add up due to deaths with unknown city/town of residence and the rounding of counts.

  Opioids include heroin, illicity manufactured frentanyl, opioid-based prescription painkillers, and other unspecified opioids.

  Cases were defined using the International Classification of Disease (ICD-10) codes for mortality. The following codes were selected from the underlying cause of death field to identify poisonings/overdoses: X4D-X49, X6D-X69, X85-X90, Y10-Y19, and Y35.2. All multiple cause of death fields were then used to identify an opioid-related death: T40.0, T40.1, T40.2, T40.3, T40.4, and T40.6.

  This report tracks all opioid-related overdoses due to difficulties in reporting heroin-associated overdoses separately. Many deaths related to heroin are not specifically coded as such due to the fast metabolism of heroin into mombine.
- to the fast metabolism of heroin into morphine.

  To maintain consistency with NCHS reporting, DPH does not include the ICD-10 code F11.1, which may include opioid-related overdose death.

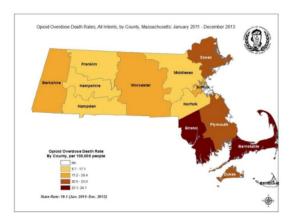
  Beginning with the May 2017 report, DPH started reporting opioid-related deaths for all intents, which includes unintentional/undetermined and suicide.

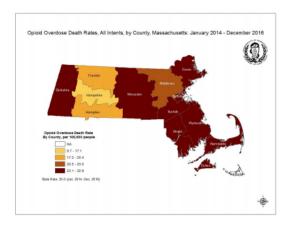
- Massachusetts Registry of Vital Records and Statistics, MDPH Massachusetts Office of the Chief Medical Examiner
- Figure 10 Overdose deaths continued to increase in frequency in 2015, 2016 and 2017 in Essex County. (published February 2019)

Opioid Overdose Death Rates, All Intents, by County

Massachusetts: January 2011- December 2013 (reference time period)

vs. January 2014 - December 2016 (current time period)





#### Notes:

- 1. All data updated on 1/25/18. Cases were defined using the International Classification of Disease (ICD-10) codes for mortality using the following codes in the underlying cause of death field: X40-X49, X60-X69, X85-X90, Y10-Y19, Y35.2. All multiple cause of death fields were then used to identify an opioid-related death, using the following ICD-10 codes: T40.0, T40.1, T40.2, T40.3, T40.4, and T40.6. Opioids include heroin, opioid-based prescription painkillers, and other unspecified opioids.
- 3. Please note that 2015-2016 death data are preliminary and subject to updates.
- 4. Rates computed for smaller counties (populations <10,000) are likely to vary significantly from year to year.
- 5. Low rates of opioid overdose deaths in a county should not be taken as an indication that there is no opioid abuse problem in that community.
- 6. County level opioid overdose death rates are computed by averaging the number of opioid-related deaths between January 2011 and December 2016 by the estimated population in the community in that same time period. County is based on county of residence for the decedent.
- 7. The rate is expressed as a value per 100,000 residents.
- 8. Beginning with the May 2017 report, DPH started reporting opioid-related deaths for all intents, which includes unintentional/undetermined and suicide

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Figure 11 Opioid-related deaths continued to increase across nearly all counties in MA during the 2014-2017 timeframe. (published February 2018)

#### **Neonatal Abstinence Syndrome (NAS)**

Neonatal Abstinence Syndrome (NAS) may occur when a pregnant woman uses drugs such as opioids during pregnancy, and is prevalent in both hospitals across MA, including Anna Jaques, with the rate of NAS in MA about 14.5 cases per 1,000 hospital births.

Anna Jaques Hospital introduce the Persist Program to support pregnant and parenting women with NAS, offering support throughout pregnancy into the first year of parenthood, as well as a free, weekly support group.



#### Behavioral Risk Factor Surveillance System (BRFSS) - Details on Substance Use

BRFSS is a continuous multimode survey of adults ages 18 and older and is conducted in all states as a collaboration between the federal Centers for Disease Control and Prevention (CDC) and state departments of public health.

All percentages in this report are weighted to represent the total Massachusetts population in 2016. *Highlights of the 2016 report:* 

#### **Risk Factors and Preventive Behaviors**

- The prevalence of cigarette smoking has been declining by an average of 7.5% per year since 2011. In 2016, 13.6% of adults reported current cigarette smoking. Adults with a disability were nearly twice as likely as those without a disability to be current cigarette smokers.
- Overall, use of e-cigarettes is 4.3%; however, among those 18-24 years of age, 10.1% report using electronic cigarettes.
- The reported prevalence of binge drinking has been declining by an average of 4.5% per year since 2011; in 2016, 17.8% of adults reported binge drinking in the previous 30 days.
   Prevalence is highest among 18-34 year olds and decreases with age. Males are more likely than females to report binge drinking.
- 60% of adults reported being overweight or obese (BMI ≥ 25.0) and 24% reported being obese (BMI ≥ 30.0). Obesity was higher among males, among Black and Hispanic adults, among those with a disability, and among those with lower educational attainment.



# VIII. Conclusions & Implementation

In the last decade, evidence has made it increasingly clear that the **social conditions in which people are born, grow, live, work, and age play a key role** in determining health outcomes and health disparities.

In April 2017, Attorney General Maura Healey convened an Advisory Task Force to update Community Benefits (CB) guidelines to incorporate these factors.

Aligned with its prior CHNA, AJH determined that there are three significant health needs facing the community it serves: 1) substance use, 2) cancer, and 3) obesity. Other health needs identified during its CHNA include mental health, housing, and the needs of the elderly population. In January 2019, the CBAC determined that after three years of focusing on obesity, cancer and substance use as its significant health priorities, that the data and available resources consulted reflected positive changes for obesity but that cancer and substance use should remain the program's core focus. The CBAC voted that, in order to address the most pressing health needs in our community and incorporate state-wide goals/social determinants of health in the most impactful and realistic way, to prioritize cancer and substance use as the most significant health needs facing its community for FY19-FY21.

In her role as Newburyport Public Health Nurse, as well as a CBAC member, Pam Palombo acknowledged and voted with the committee to select these two health priorities as the most pressing and most useful of the program's resources.

While obesity would not be a primary focus, the World Cancer Research Fund estimates that about 20% of all cancers diagnosed in the US are related to body fatness, physical inactivity, excess alcohol consumption, and/or poor nutrition. Thus, the AJH CBAC agreed that access to healthy foods as well as opportunities for exercise will help us address factors impacting both cancer and obesity.

- Continue support of programs like the Newburyport Farmers' Market and Nourishing the Northshore (access to healthy food)
- Continue sponsorship of free workout opportunities like Amesbury's summer-long "Fitness by the Falls" and Yankee Homecoming Waterfront Workouts (physical activity)
- Reduce road race sponsorships to redistribute funds to social determinants of health areas

### **Plans & Resources Available to Address Health Priorities**

#### Cancer:

- Increase Cancer Screenings: Provide cancer screenings at a lower (or no) cost; Align efforts with American College of Surgeons (ACOS) requirements for Anna Jaques Cancer Center; Skin Screening: host mobile skin screening scanner to raise prevention and awareness to skin cancer in the spring/summer months and give out sunscreen:
- Continue to Support Local & Regional Efforts: Greater Newburyport Ovarian Cancer Awareness
  (GNOCA); North of Boston Cancer Resource: provides an online directory of healing therapies and
  programs available in the area; partner efforts with AJH Cancer Center; Continue to expand efforts

during Breast Cancer Awareness Month (mammogram reminder campaign; Pink Up the Port; Celebrating Survival) to all communities like Newburyport, Haverhill, Amesbury, Salisbury

• **Support Survivorship**: YWCA Encore Program: extended program to all cancers (previously was breast cancer only); Cancer Survivors' Day: local schools design comfort rocks/acts of kindness for cancer patients and survivor

#### **Substance Use:**

- Partnership with Essex County Asset Builder Network (ECAB): designed to coordinate a comprehensive
  and integrated delivery of best practices in prevention strategies, educational curricula and programs
  through schools to alleviate needs and gaps in services. AJH participates on the board and will partner to
  support efforts
- Addiction, Prevention & Awareness Month: partner with the City of Newburyport and Newburyport
  Public Schools in May 2018 (changed from March to align with the national observance week) to host
  educational and awareness raising initiatives in Newburyport; AJH to host CME for physicians and
  clinical community
- Hospital ED Commitment: AJH Emergency Department committed to the MA Hospital Association to have an ED Policy & Procedure in place to address opioid misuse; AJH representatives to participate and attend Opioid Task Force meetings and committees in surrounding communities to partner on efforts
- **Support Local Resources & Programs**: Continue to support programs such as The Pettengill House, Link House, YWCA, Beacon Coalition, Essex County Asset Builder Network, and others, through sponsorships and shared resources

#### **Increasing Support for Vulnerable Communities:**

FY19-FY21 plans include identifying partnerships and opportunities to further support lower income and vulnerable populations in our community, specifically in Haverhill and Salisbury.

Activation will include partnerships such as:

- Support Haverhill resources tasked with support youth; overall wellness; and addressing social determinants of health:
  - YWCA Haverhill: For example: sponsoring "Healthy Kids Day"
  - Partnership with Emmaus, Inc.: hospital providers to give free health education seminars;
     supporting housing programs
- CB efforts to align with Anna Jaques Hospital's "Persist" Program that directly supports pregnant and parenting women in the community in recovery of substance use disorder.

#### **Health Factors Impacting Massachusetts Residents**

Updated Community Benefits Guidelines, published in 2018 by the AGO, included the call for hospitals and HMOs to leverage their CB programs to address statewide health challenges to build long-term capacity to improve outcomes and reduce disparities throughout Massachusetts.

While the AJH CHNA report and CB program identifies health priorities specific to the communities the hospital serves, efforts also aim to align with statewide priorities, and as such is important to reflect on health factors impacting Massachusetts residents.

As identified by the <u>Behavioral Risk Factor Surveillance System</u> (BRFSS), with all percentages in this report are weighted to represent the total Massachusetts population in 2016. *Highlights of the 2016 report:* 

#### **Overall Health Measures**

• Hispanic adults were more likely than White or Black (non-Hispanic) adults to report that their overall health was fair or poor.

#### **Health Care Access and Utilization**

- Overall, 3.8% of adults ages 18-64 reported not having any health insurance; there has been an average 2.5% per year decrease in those reporting not having health insurance since 2012. Males were more likely than females and Hispanic adults were more likely than White adults to not have health insurance. Those aged 25-34 were more likely than any other age group to be uninsured.
- Males were less likely than females to have a personal health care provider or to have had a routine check-up in the previous year.
- Approximately 3 out of 4 adults reported that they had a dental visit in the previous year. Those with four or more years of college education and those with a household income of \$75,000 or more were more likely than others to have had a dental visit in the previous year.

#### **Chronic Health Conditions**

- The crude prevalence of diabetes has been increasing by an average of 3% per year since 2011 and that of pre-diabetes by an average of 4.5% per year. In 2016, 9.3% of adults reported that they had ever been diagnosed with diabetes and an additional 8.4% had been told that they have pre-diabetes.
- Asthma remains more prevalent in Massachusetts than in much of the rest of the nation. In 2016, 10% of adults reported that they currently have asthma (national range = 5.1 12.2%). Females were twice as likely as males to report currently having asthma.
- 19% of adults reported that they had ever been diagnosed with a depressive disorder. Females
  were more likely than males to have been diagnosed with depression. Prevalence of a depression
  diagnosis decreases with increasing educational attainment and with increasing household
  income.

"Other Topics" across MA included:

- 46% of adults ages 18-64 reported that they had ever been tested for HIV. Adults 18-64 years of age with a disability were more likely to report ever having been tested for HIV than those without a disability. Black adults and Hispanic adults were more likely than White adults or Asian adults to report ever having had an HIV test.
- 17% of female adults and 5% of male adults reported that they had experienced sexual violence in their lifetime. Adults with a disability (males and females combined) were nearly twice as likely to report experiencing sexual violence as adults without a disability.
- 29% of adults ages 65 and older reported that they had fallen at least once in the prior year and 39% of those reported that they sustained an injury from a fall.
- 12% of adults reported non-medical use of marijuana in the previous year. Males were more likely than females to report use. Younger adults (ages 18-34) were much more likely than older adults to report non-medical use of marijuana.
- One in three adults reported that they had ever been prescribed an opiate and 2.7% reported non-medical use of an opiate in the previous year.

#### **Non-Priorities**

While the Community Benefits Advisory Committee narrowed chosen health priorities from three to two (cancer and substance use) in order to incorporate elements of social determinants of health, there are other important health issues that impact the community, including:

- Mental Health: at the January 2019 CBAC meeting, the group voted to selected substance use as one of
  two health priorities, while acknowledging that mental health plays a role for many individuals
  struggling with substance use. Anna Jaques, and the AJH CBAC, support local programs aimed both at
  early intervention for prevention, as well as supports direct resources in the community.
- Housing: John Feehan, Executive Director of the YWCA of Newburyport, reviewed the 2018 CHNA and shared that in addition to the highlighted health needs, the Greater Newburyport area struggles with housing issues that are specific to this community. For example, the cost of housing is astronomical which often results in "coupling up" of many different people in a small space to be able to afford the rent.
  - Anna Jaques will continue to partner with the YWCA and identify ways to support their efforts to address housing insecurity in the community, whether that is sharing resources, helping to raise awareness to the issue, or promoting YWCA services available.
- Elderly: (as identified in the Health Partnership's report) Common health problems described in key informant interviews and focus groups include lack of or no dental insurance, hoarding, homelessness, social isolation, being homebound, and chronic diseases. The assessment highlights that they have poor access to healthcare due to transportation, availability of appointments, and health insurance coverages.

At a key informant interview at the Amesbury Senior Center in 2015, major topics of discussion included:

- Transportation issues
- Affordable insurance
- Affordable housing
- Substance use

The participants explained how funding for programs has not been a problem. For example, there are various clinics held for blood pressure checks, cholesterol levels, diabetes screening and more. There are educational programs, physical activities such as Zumba to improve healthy living, and a brown paper bag lunch program.

Anna Jaques will continue to partner with area Senior Centers to support efforts on wellness and support, such as educational seminars or health fairs.

# VI. Health Status Indicators by Community

#### **AMESBURY**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$24,103	\$25,952
Population below 100% of poverty level	951	5.9	9.3
Population below 200% of poverty level	2,988	18.6	21.7
Children less than 18 years of age living below 100% of poverty	311	7.6	12.0
line			
Unemployed persons age 16 and over	737	8.3	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	4,293	26.1	23.6
Persons under 20 years of age	3,958	24.3	24.8
Persons age 65 years and over	2,011	12.4	13.8
White non-Hispanic persons	15,723	96.6	78.4
Black non-Hispanic persons	108	0.7	6.3
Hispanic persons	310	1.9	9.6
Asian persons	112	0.7	5.5
AFDC Medicaid Recipients	751	5.3	7.1
Multiple Assistance Unit Medicaid Recipients	50	0.9	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age)

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# **Perinatal and Child Health Indicators for Amesbury**

		rea ount	Area Fertility	State Fertility
		· · · · · ·	Rate	Rate
Births to women ages 15 to 44	:	204	66.0	53.8
White non-Hispanic		193	65.4	49.0
Black non-Hispanic		NA	NA	67.8
Hispanic		NA	NA	65.5
Asian		NA	NA	57.5
	A	rea	Area Infant	State Infant
	Co	unt	Mortality	Mortality
			Rate	Rate
Infant Deaths		1	NA	4.4
White non-Hispanic		1	NA	3.4
Black non-Hispanic		0	0.0	8.2

Hispanic	0	0.0	6.1
Asian	0	0.0	4.3
	Area	Area	State
	Count	Percent	Percent
Low Birthweight (less than 2500 grams)	7	3.4	7.8
Births to adolescent mothers	8	3.9	5.4
Mothers not receiving prenatal care in first trimester	30	15.2	16.1
Mothers with adequate prenatal care	175	89.7	84.9
Mothers receiving publicly funded prenatal care	59	28.9	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	1	1.9	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program Fertility Rate is expressed per 1,000 women ages 15 to 44 (of a given race/ethnicity where mentioned) Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year Lead poisoning rates are expressed per 1,000 children screened.

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# **Infectious Disease for Amesbury**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	13	78.2	261.0
Prevalence			
AIDS and HIV-	0	0.0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	N/A	N/A	5.8
Hepatitis-B	N/A	N/A	11.3
Syphilis	0	0	9.4
Gonorrhea	N/A	N/A	37.9
Chlamydia	20	120.4	322.1

Crude Rates are expressed per 100,000 persons

2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based, Copyright © 1995-2013 Massachusetts Department of Public Health

# **Injury for Amesbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	1	6.1	5.8
related injury deaths			
Suicide	2	123	9.0
Homicide	0	0.0	3.1

Crude rates are expressed per 100,000 persons, Copyright © 1995-2013 Massachusetts Department of Public Health 2010 Mortality (Vital Records) ICD-10 based

### **Chronic Disease for Amesbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Total deaths (all	131	728.4	667.8
causes)			
Total cancer deaths	31	173.2	1703
Lung cancer deaths	11	61.4	47.2
Breast cancer deaths	1	11.1	19.1
Cardiovascular	42	227.2	192.0
disease deaths			

 $Age-adjusted\ rates\ are\ expressed\ per\ 100,000\ persons,\ Copyright\ @\ 1995-2013\ Massachusetts\ Department\ of\ Public\ Health\ 2010\ Mortality\ (Vital\ Records)\ ICD-10\ based$ 

## **Hospital Discharge for Primary Care Manageable Conditions for Amesbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	25	145.4	160.2
Angina	N/A	N/A	10.3
Bacterial pneumonia	63	371.2	296.1

Age-adjusted rates are expressed per 100,000 persons, Copyright © 1995-2013 Massachusetts Department of Public Health 2009 Calendar Year Hospital Discharges (UHDDS)

## **Substance Use for Amesbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	243	1462.3	1532.4
funded treatment			
programs			
Injection drug user	65	391.2	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	35	210.6	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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#### **BOXFORD**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$48,846	\$25,952
Population below 100% of poverty level	108	1.4	9.3
Population below 200% of poverty level	246	3.1	21.7
Children less than 18 years of age living below 100% of poverty	21	0.8	12.0
line			
Unemployed persons age 16 and over	255	6.1	8.5

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Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	2,551	32.2	23.6
Persons under 20 years of age	2,394	30.1	24.8
Persons age 65 years and over	1,049	13.2	13.8
White non-Hispanic persons	7,659	96.2	78.4
Black non-Hispanic persons	36	0.5	6.3
Hispanic persons	145	1.8	9.6
Asian persons	123	1.5	5.5
AFDC Medicaid Recipients	17	0.2	7.1
Multiple Assistance Unit Medicaid Recipients	22	0.8	1.2

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AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

#### **Perinatal and Child Health Indicators for Boxford**

	Area Count	Area Fertility	State Fertility
		Rate	Rate
Births to women ages 15 to 44	42	36.0	53.8
White non-Hispanic	36	32.7	49.0
Black non-Hispanic	0	0.0	67.8
Hispanic	NA	NA	65.5
Asian	NA	NA	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	0	0.0	4.4
White non-Hispanic	0	0.0	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight ( less than 2500 grams)	11	26.2	7.8
Births to adolescent mothers	0	0.0	5.4
Mothers not receiving prenatal care in first trimester	0	0.0	16.1
Mothers with adequate prenatal care (a)	32	100.0	84.9
Mothers receiving publicly funded prenatal care (b)	NA	NA	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

#### Infectious Disease for Boxford

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	NA	NA	261.0
Prevalence			
AIDS and HIV-	0	0.0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	0	0	5.8
Hepatitis-B	0	0	11.3
Syphilis	0	0	9.4
Gonorrhea	0	0	37.9
Chlamydia	NA	NA	322.1

Crude Rates are expressed per 100,000 persons

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2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based

## **Injury for Boxford**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	0	0	5.8
related injury deaths			
Suicide	0	0	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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2010 Mortality (Vital Records) ICD-10 based

#### **Chronic Disease for Boxford**

Area Count	Age-Adjusted Rate	State-Adjusted Rate

Total deaths (all	42	540.5	667.8
causes)			
Total cancer deaths	14	161.3	170.3
Lung cancer deaths	3	35.4	47.2
Breast cancer deaths	1	22.5	19.1
Cardiovascular	13	170.6	192.0
disease deaths			

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2010 Mortality (Vital Records) ICD-10 based

## **Hospital Discharge for Primary Care Manageable Conditions: Boxford**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	NA	NA	160.2
Angina	0	0	10.3
Bacterial pneumonia	9	136.4	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

#### **Substance Use for Boxford**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	31	379.8	1532.4
funded treatment			
programs			
Injection drug user	12	147.0	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	10	122.5	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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### **GEORGETOWN**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$28,846	\$25,952
Population below 100% of poverty level	309	4.2	9.3
Population below 200% of poverty level	762	10.4	21.7
Children less than 18 years of age living below 100% of poverty	85	4.1	12.0
line			
Unemployed persons age 16 and over	307	6.7	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	2,113	28.6	23.6
Persons under 20 years of age	2,343	28.6	24.8
Persons age 65 years and over	924	11.3	13.8
White non-Hispanic persons	7,920	96.8	78.4
Black non-Hispanic persons	37	0.5	6.3
Hispanic persons	143	1.7	9.6
Asian persons	76	0.9	5.5
AFDC Medicaid Recipients	63	1.0	7.1
Multiple Assistance Unit Medicaid Recipients	21	0.9	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

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## **Perinatal and Child Health Indicators for Georgetown**

	Area Count	Area Fertility	State Fertility
Disthata wasan agas 15 to 44	70	Rate	Rate
Births to women ages 15 to 44	70	50.0	53.8
White non-Hispanic	68	50.6	49.0
Black non-Hispanic	0	0.0	67.8
Hispanic	0	0.0	65.5
Asian	NA	NA	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	0	0.0	4.4
White non-Hispanic	0	0.0	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight ( less than 2500 grams)	NA	NA	7.8
Births to adolescent mothers	0	0.0	5.4
Mothers not receiving prenatal care in first trimester	6	9.5	16.1
Mothers with adequate prenatal care (a)	58	93.5	84.9
Mothers receiving publicly funded prenatal care (b)	9	12.9	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

### **Infectious Disease for Georgetown**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	NA	NA	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	0	0	5.8
Hepatitis-B	NA	NA	11.3
Syphilis	0	0	9.4
Gonorrhea	0	0	37.9
Chlamydia	7	87.3	322.1

Crude Rates are expressed per 100,000 persons

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2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based

# **Injury for Georgetown**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	1	12.2	5.8
related injury deaths			
Suicide	1	12.2	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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#### **Chronic Disease for Georgetown**

Area Count	Age-Adjusted Rate	State-Adjusted Rate

Total deaths (all	51	702.2	667.8
causes)			
Total cancer deaths	10	148.5	170.3
Lung cancer deaths	3	44.6	47.2
Breast cancer deaths	0	0	19.1
Cardiovascular	13	195.6	192.0
disease deaths			

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2010 Mortality (Vital Records) ICD-10 based

## **Hospital Discharge for Primary Care Manageable Conditions for Georgetown**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	NA	NA	160.2
Angina	0	0	10.3
Bacterial pneumonia	26	538.8	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

#### **Substance Use for Georgetown**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	51	635.7	1532.4
funded treatment			
programs			
Injection drug user	13	162.0	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	8	99.7	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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#### **GROVELAND**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$25,430	\$25,952
Population below 100% of poverty level	269	4.5	9.3
Population below 200% of poverty level	759	12.6	21.7
Children less than 18 years of age living below 100% of poverty	128	7.1	12.0
line			
Unemployed persons age 16 and over	273	6.9	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	1,787	29.6	23.6
Persons under 20 years of age	1,733	26.8	24.8
Persons age 65 years and over	973	15.1	13.8
White non-Hispanic persons	6,282	97.3	78.4
Black non-Hispanic persons	28	0.4	6.3
Hispanic persons	85	1.3	9.6
Asian persons	61	0.9	5.5
AFDC Medicaid Recipients	81	1.6	7.1
Multiple Assistance Unit Medicaid Recipients	23	1.2	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

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#### **Perinatal and Child Health Indicators for Groveland**

	Area Count	Area Fertility	State Fertility
		Rate	Rate
Births to women ages 15 to 44	48	44.9	53.8
White non-Hispanic	46	44.7	49.0
Black non-Hispanic	0	0.0	67.8
Hispanic	NA	NA	65.5
Asian	0	0.0	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	0	0.0	4.4
White non-Hispanic	0	0.0	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight (less than 2500 grams)	NA	NA	7.8
Births to adolescent mothers	NA	NA	5.4
Mothers not receiving prenatal care in first trimester	NA	NA	16.1
Mothers with adequate prenatal care (a)	35	89.7	84.9
Mothers receiving publicly funded prenatal care (b)	NA	NA	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

#### Infectious Disease for Groveland

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	NA	NA	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	0	0	5.8
Hepatitis-B	NA	NA	11.3
Syphilis	0	0	9.4
Gonorrhea	0	0	37.9
Chlamydia	9	136.5	322.1

Crude Rates are expressed per 100,000 persons

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2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based

# **Injury for Groveland**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	1	15.5	5.8
related injury deaths			
Suicide	0	0	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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2010 Mortality (Vital Records) ICD-10 based

#### **Chronic Disease for Groveland**

Area Count	Age-Adjusted Rate	State-Adjusted Rate

Total deaths (all	47	598.2	667.8
causes)			
Total cancer deaths	16	212.0	170.3
Lung cancer deaths	6	77.7	47.2
Breast cancer deaths	1	42.7	19.1
Cardiovascular	12	146.2	192.0
disease deaths			

Age-adjusted rates are expressed per 100,000 persons Copyright © 1995-2013 Massachusetts Department of Public Health

2010 Mortality (Vital Records) ICD-10 based

## Hospital Discharge for Primary Care Manageable Conditions for Groveland

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	NA	NA	160.2
Angina	NA	NA	10.3
Bacterial pneumonia	20	366.4	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

#### **Substance Abuse for Groveland**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	62	940.6	1532.4
funded treatment			
programs			
Injection drug user	16	242.7	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	10	151.7	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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### **HAVERHILL**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$23,280	\$25,952
Population below 100% of poverty level	5,243	9.1	9.3
Population below 200% of poverty level	12,578	21.8	21.7
Children less than 18 years of age living below 100% of	1,900	12.8	12.0
poverty line			
Unemployed persons age 16 and over	3,003	9.4	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	15,152	25.7	23.6
Persons under 20 years of age	15,421	25.3	24.8
Persons age 65 years and over	7,405	12.2	13.8
White non-Hispanic persons	49,399	81.1	78.4
Black non-Hispanic persons	1,571	2.6	6.3
Hispanic persons	8,831	14.5	9.6
Asian persons	993	1.6	5.5
AFDC Medicaid Recipients	4,193	8.6	7.1
Multiple Assistance Unit Medicaid Recipients	266	1.4	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

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#### **Perinatal and Child Health Indicators for Haverhill**

	Area Count	Area Fertility	State Fertility
		Rate	Rate
Births to women ages 15 to 44	823	64.8	53.8
White non-Hispanic	616	62.1	49.0
Black non-Hispanic	31	91.7	67.8
Hispanic	153	70.6	65.5
Asian	15	56.6	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	4	4.8	4.4
White non-Hispanic	3	4.9	3.4
Black non-Hispanic	1	NA	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight (less than 2500 grams)	70	8.5	7.8
Births to adolescent mothers	57	6.9	5.4
Mothers not receiving prenatal care in first trimester	154	18.9	16.1
Mothers with adequate prenatal care (a)	691	84.8	84.9
Mothers receiving publicly funded prenatal care (b)	320	38.9	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	1	0.4	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

#### **Infectious Disease for Haverhill**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	108	179.9	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	NA	NA	3.7
Pertussis	NA	NA	5.8
Hepatitis-B	NA	NA	11.3
Syphilis	NA	NA	9.4
Gonorrhea	7	11.7	37.9
Chlamydia	201	334.8	322.1

Crude Rates are expressed per 100,000 persons

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2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based

## **Injury for Haverhill**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	3	4.9	5.8
related injury deaths			
Suicide	6	9.9	9.0
Homicide	3	4.9	3.1

Crude rates are expressed per 100,000 persons

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2010 Mortality (Vital Records) ICD-10 based

#### **Chronic Disease for Haverhill**

Area Count	Age-Adjusted Rate	State-Adjusted Rate

Total deaths (all	501	739.5	667.8
causes)			
Total cancer deaths	113	174.5	170.3
Lung cancer deaths	34	55.5	47.2
Breast cancer deaths	6	17.0	19.1
Cardiovascular	169	245.7	192.0
disease deaths			

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2010 Mortality (Vital Records) ICD-10 based

## **Hospital Discharge for Primary Care Manageable Conditions for Haverhill**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	130	216.0	160.2
Angina	10	17.6	10.3
Bacterial pneumonia	229	357.6	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

#### **Substance Abuse for Haverhill**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	798	1329.3	1532.4
funded treatment			
programs			
Injection drug user	281	468.1	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	124	206.6	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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#### **MERRIMAC**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$24,869	\$25,952
Population below 100% of poverty level	165	2.7	9.3
Population below 200% of poverty level	559	9.2	21.7
Children less than 18 years of age living below 100% of poverty	13	0.7	12.0
line			
Unemployed persons age 16 and over	276	7.6	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	1,779	29.0	23.6
Persons under 20 years of age	1,694	26.7	24.8
Persons age 65 years and over	842	13.3	13.8
White non-Hispanic persons	6,138	96.8	78.4
Black non-Hispanic persons	36	0.6	6.3
Hispanic persons	115	1.8	9.6
Asian persons	41	0.6	5.5
AFDC Medicaid Recipients	121	2.3	7.1
Multiple Assistance Unit Medicaid Recipients	13	0.6	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

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#### **Perinatal and Child Health Indicators for Merrimac**

	Area Count	Area Fertility Rate	State Fertility Rate
Births to women ages 15 to 44	36	32.3	53.8
White non-Hispanic	35	32.8	49.0
Black non-Hispanic	0	0.0	67.8
Hispanic	NA	NA	65.5
Asian	0	0.0	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	0	0.0	4.4
White non-Hispanic	0	0.0	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight (less than 2500 grams)	NA	NA	7.8
Births to adolescent mothers	0	0.0	5.4
Mothers not receiving prenatal care in first trimester	6	17.6	16.1
Mothers with adequate prenatal care (a)	30	90.9	84.9
Mothers receiving publicly funded prenatal care (b)	5	13.9	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

#### **Infectious Disease for Merrimac**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	NA	NA	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	0	0	5.8
Hepatitis-B	0	0	11.3
Syphilis	0	0	9.4
Gonorrhea	NA	NA	37.9
Chlamydia	11	173.2	322.1

Crude Rates are expressed per 100,000 persons

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2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based

# **Injury for Merrimac**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	0	0	5.8
related injury deaths			
Suicide	0	0	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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#### **Chronic Disease for Merrimac**

Area Count Age-Adjusted Rate State-Adjusted Rate	Area Count	Age-Adjusted Rate	State-Adjusted Rate
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Total deaths (all	41	621.7	667.8
causes)			
Total cancer deaths	9	120.8	170.3
Lung cancer deaths	3	36.1	47.2
Breast cancer deaths	1	21.0	19.1
Cardiovascular	17	258.7	192.0
disease deaths			

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2010 Mortality (Vital Records) ICD-10 based

## **Hospital Discharge for Primary Care Manageable Conditions for Merrimac**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	NA	NA	160.2
Angina	0	0	10.3
Bacterial pneumonia	29	483.2	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

#### **Substance Use for Merrimac**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	52	818.9	1532.4
funded treatment			
programs			
Injection drug user	NA	NA	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	11	173.2	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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#### **NEWBURY**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$34,640	\$25,952
Population below 100% of poverty level	208	3.1	9.3
Population below 200% of poverty level	839	12.6	21.7
Children less than 18 years of age living below 100% of poverty	52	2.9	12.0
line			
Unemployed persons age 16 and over	278	7.3	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	1,820	27.1	23.6
Persons under 20 years of age	1,637	24.6	24.8
Persons age 65 years and over	924	13.9	13.8
White non-Hispanic persons	6,531	98.0	78.4
Black non-Hispanic persons	15	0.2	6.3
Hispanic persons	67	1.0	9.6
Asian persons	43	0.6	5.5
AFDC Medicaid Recipients	89	1.6	7.1
Multiple Assistance Unit Medicaid Recipients	60	2.9	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

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# **Perinatal and Child Health Indicators for Newbury**

	Area Count	Area Fertility	State Fertility
		Rate	Rate
Births to women ages 15 to 44	34	33.9	53.8
White non-Hispanic	33	34.0	49.0
Black non-Hispanic	0	0.0	67.8
Hispanic	NA	NA	65.5
Asian	0	0.0	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	0	0.0	4.4
White non-Hispanic	0	0.0	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight (less than 2500 grams)	NA	NA	7.8
Births to adolescent mothers	0	0.0	5.4
Mothers not receiving prenatal care in first trimester	5	15.2	16.1
Mothers with adequate prenatal care (a)	28	84.8	84.9
Mothers receiving publicly funded prenatal care (b)	8	24.2	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

### **Infectious Disease for Newbury**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	NA	NA	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	NA	NA	5.8
Hepatitis-B	0	0	11.3
Syphilis	NA	NA	9.4
Gonorrhea	0	0	37.9
Chlamydia	NA	NA	322.1

Crude Rates are expressed per 100,000 persons

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2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based

# **Injury for Newbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	1	15	5.8
related injury deaths			
Suicide	0	0	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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# **Chronic Disease for Newbury**

Area Count Age-Adjusted Rate State-Adjusted Rate	
--	--

Total deaths (all	39	5723	667.8
causes)			
Total cancer deaths	9	130.0	170.3
Lung cancer deaths	4	62.2	47.2
Breast cancer deaths	1	22.9	19.1
Cardiovascular	20	290.4	192.0
disease deaths			

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2010 Mortality (Vital Records) ICD-10 based

### **Hospital Discharge for Primary Care Manageable Conditions for Newbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	10	143.4	160.2
Angina	NA	NA	10.3
Bacterial pneumonia	26	381.1	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

### **Substance Use for Newbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	36	515.0	1532.4
funded treatment			
programs			
Injection drug user	NA	NA	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	13	186.0	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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### **NEWBURYPORT**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$34,187	\$25,952
Population below 100% of poverty level	877	5.2	9.3
Population below 200% of poverty level	2,417	14.3	21.7
Children less than 18 years of age living below 100% of poverty	231	6.5	12.0
line			
Unemployed persons age 16 and over	726	7.3	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	3,551	20.7	23.6
Persons under 20 years of age	3,872	22.2	24.8
Persons age 65 years and over	2,880	16.5	13.8
White non-Hispanic persons	16,814	96.6	78.4
Black non-Hispanic persons	95	0.5	6.3
Hispanic persons	291	1.7	9.6
Asian persons	195	1.1	5.5
AFDC Medicaid Recipients	348	2.4	7.1
Multiple Assistance Unit Medicaid Recipients	51	1.0	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

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# **Perinatal and Child Health Indicators for Newburyport**

	Area Count	Area Fertility	State Fertility
		Rate	Rate
Births to women ages 15 to 44	133	47.1	53.8
White non-Hispanic	122	45.4	49.0
Black non-Hispanic	NA	NA	67.8
Hispanic	NA	NA	65.5
Asian	NA	NA	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	1	NA	4.4
White non-Hispanic	1	NA	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area Count	Area Percent	State Percent
Low Birthweight ( less than 2500 grams)	7	5.1	7.8
Births to adolescent mothers	NA	NA	5.4
Mothers not receiving prenatal care in first trimester	20	15.3	16.1
Mothers with adequate prenatal care (a)	111	85.4	84.9
Mothers receiving publicly funded prenatal care (b)	23	17.0	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

### **Infectious Disease for Newburyport**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	11	63.2	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	NA	NA	5.8
Hepatitis-B	0	0	11.3
Syphilis	0	0	9.4
Gonorrhea	NA	NA	37.9
Chlamydia	12	69.0	322.1

Crude Rates are expressed per 100,000 persons

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# **Injury for Newburyport**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	1	5.7	5.8
related injury deaths			
Suicide	3	17.2	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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# **Chronic Disease for Newburyport**

Area Count Age-Adjusted Rate State-Adjusted Rate	
--	--

Total deaths (all	185	750.4	667.8
causes)			
Total cancer deaths	36	150.1	170.3
Lung cancer deaths	7	31.1	47.2
Breast cancer deaths	4	25.1	19.1
Cardiovascular	47	176.9	192.0
disease deaths			

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2010 Mortality (Vital Records) ICD-10 based

### **Hospital Discharge for Primary Care Manageable Conditions for Newburyport**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	27	123.6	160.2
Angina	NA	NA	10.3
Bacterial pneumonia	92	462.4	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

### **Substance Use for Newburyport**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	125	718.6	1532.4
funded treatment			
programs			
Injection drug user	47	270.2	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	32	184.0	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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#### **ROWLEY**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$27,413	\$25,952
Population below 100% of poverty level	224	4.1	9.3
Population below 200% of poverty level	688	12.7	21.7
Children less than 18 years of age living below 100% of poverty	88	5.8	12.0
line			
Unemployed persons age 16 and over	254	7.6	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	1,539	28.0	23.6
Persons under 20 years of age	1,547	26.4	24.8
Persons age 65 years and over	672	11.5	13.8
White non-Hispanic persons	5,716	97.6	78.4
Black non-Hispanic persons	16	0.3	6.3
Hispanic persons	59	1.0	9.6
Asian persons	64	1.1	5.5
AFDC Medicaid Recipients	83	1.8	7.1
Multiple Assistance Unit Medicaid Recipients	15	0.9	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

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## **Perinatal and Child Health Indicators for Rowley**

	Area Count	Area Fertility	State Fertility
Disthata wasan agas 15 to 44	40	Rate	Rate
Births to women ages 15 to 44	49	50.8	53.8
White non-Hispanic	45	48.8	49.0
Black non-Hispanic	0	0.0	67.8
Hispanic	NA	NA	65.5
Asian	NA	NA	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	0	0.0	4.4
White non-Hispanic	0	0.0	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight ( less than 2500 grams)	0	0.0	7.8
Births to adolescent mothers	NA	NA	5.4
Mothers not receiving prenatal care in first trimester	5	12.8	16.1
Mothers with adequate prenatal care (a)	32	86.5	84.9
Mothers receiving publicly funded prenatal care (b)	9	18.4	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

#### **Infectious Disease for Rowley**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	16	102.9	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	0	0	5.8
Hepatitis-B	0	0	11.3
Syphilis	0	0	9.4
Gonorrhea	0	0	37.9
Chlamydia	6	102.9	322.1

Crude Rates are expressed per 100,000 persons

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# **Injury for Rowley**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	1	17.1	5.8
related injury deaths			
Suicide	0	0	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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# **Chronic Disease for Rowley**

Area Count Age-Adjusted Rate State-Adjusted Rate	Area Count	Age-Adjusted Rate	State-Adjusted Rate
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Total deaths (all	42	778.9	667.8
causes)			
Total cancer deaths	7	143.2	170.3
Lung cancer deaths	0	0	47.2
Breast cancer deaths	1	22.8	19.1
Cardiovascular	18	340.8	192.0
disease deaths			

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2010 Mortality (Vital Records) ICD-10 based

## **Hospital Discharge for Primary Care Manageable Conditions for Rowley**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	8	136.7	160.2
Angina	0	0	10.3
Bacterial pneumonia	18	395.0	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

### **Substance Use for Rowley**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	67	1148.9	1532.4
funded treatment			
programs			
Injection drug user	14	240.1	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	15	257.2	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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#### **SALISBURY**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$21,608	\$25,952
Population below 100% of poverty level	526	6.8	9.3
Population below 200% of poverty level	1,629	21.0	21.7
Children less than 18 years of age living below 100% of poverty	171	9.6	12.0
line *			
Unemployed persons age 16 and over	474	10.2	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	1,847	23.6	23.6
Persons under 20 years of age	1,807	21.8	24.8
Persons age 65 years and over	1,260	15.2	13.8
White non-Hispanic persons	8,004	96.6	78.4
Black non-Hispanic persons	35	0.4	6.3
Hispanic persons	128	1.5	9.6
Asian persons	98	1.2	5.5
AFDC Medicaid Recipients	442	7.1	7.1
Multiple Assistance Unit Medicaid Recipients	26	1.1	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

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# **Perinatal and Child Health Indicators for Salisbury**

	Area Count	Area Fertility	State Fertility
		Rate	Rate
Births to women ages 15 to 44	73	50.2	53.8
White non-Hispanic	68	49.0	49.0
Black non-Hispanic	0	0.0	67.8
Hispanic	NA	NA	65.5
Asian	NA	NA	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	1	NA	4.4
White non-Hispanic	1	NA	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight (less than 2500 grams)	8	11.0	7.8
Births to adolescent mothers	NA	NA	5.4
Mothers not receiving prenatal care in first trimester	12	17.9	16.1
Mothers with adequate prenatal care (a)	59	88.1	84.9
Mothers receiving publicly funded prenatal care (b)	23	32.4	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

### **Infectious Disease for Salisbury**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	8	96.8	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	NA	NA	3.7
Pertussis	0	0	5.8
Hepatitis-B	NA	NA	11.3
Syphilis	0	0	9.4
Gonorrhea	NA	NA	37.9
Chlamydia	12	145.2	322.1

Crude Rates are expressed per 100,000 persons

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2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based

# **Injury for Salisbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	1	12.1	5.8
related injury deaths			
Suicide	1	12.1	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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# **Chronic Disease for Salisbury**

Area Count Age-Adjusted Rate State-Adjusted Rate	
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Total deaths (all	74	796.1	667.8
causes)			
Total cancer deaths	23	215.2	170.3
Lung cancer deaths	9	71.0	47.2
Breast cancer deaths	2	38.1	19.1
Cardiovascular	24	263.2	192.0
disease deaths			

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2010 Mortality (Vital Records) ICD-10 based

## **Hospital Discharge for Primary Care Manageable Conditions for Salisbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	3	341.3	160.2
Angina	NA	NA	10.3
Bacterial pneumonia	36	417.1	296.1

Age-adjusted rates are expressed per 100,000 persons

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2009 Calendar Year Hospital Discharges (UHDDS)

### **Substance Use for Salisbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	301	3642.2	1532.4
funded treatment			
programs			
Injection drug user	125	1512.5	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	33	399.3	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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### **WEST NEWBURY**

	Area	Area	State
	Count	Percent	Percent
Per Capita Income		\$35,323	\$25,952
Population below 100% of poverty level	156	3.8	9.3
Population below 200% of poverty level	340	8.2	21.7
Children less than 18 years of age living below 100% of poverty	48	3.8	12.0
line			
Unemployed persons age 16 and over	152	6.5	8.5

Unemployment Rate: all unemployed persons in labor force divided by all persons in labor force Copyright © Census 2000 by U.S Census Bureau, 2010 Employment and Training

	Area	Area	State
	Count	Percent	Percent
Persons under 18 years of age	1,246	30.0	23.6
Persons under 20 years of age	1,216	28.7	24.8
Persons age 65 years and over	484	11.4	13.8
White non-Hispanic persons	4,117	97.2	78.4
Black non-Hispanic persons	4	0.1	6.3
Hispanic persons	66	1.6	9.6
Asian persons	44	1.0	5.5
AFDC Medicaid Recipients	20	0.6	7.1
Multiple Assistance Unit Medicaid Recipients	10	0.8	1.2

AFDC recipients percent denominator is persons age less than 65 (eligible population based on age).

Multiple Assistance Unit recipients percent denominator is persons age less than 25 (eligible population based on age).

Copyright © Census 2000 by U.S Census Bureau, 1996 Medicaid (MassHealth)

## **Perinatal and Child Health Indicators for West Newbury**

	Area Count	Area Fertility	State Fertility
Dirths to woman agas 15 to 44	22	<b>Rate</b> 37.2	Rate
Births to women ages 15 to 44	22		53.8
White non-Hispanic	20	34.8	49.0
Black non-Hispanic	0	0.0	67.8
Hispanic	NA	NA	65.5
Asian	NA	NA	57.5
	Area	Area Infant	State Infant
	Count	Mortality	Mortality
		Rate	Rate
Infant Deaths	0	0.0	4.4
White non-Hispanic	0	0.0	3.4
Black non-Hispanic	0	0.0	8.2
Hispanic	0	0.0	6.1
Asian	0	0.0	4.3

	Area	Area	State
	Count	Percent	Percent
Low Birthweight (less than 2500 grams)	NA	NA	7.8
Births to adolescent mothers	NA	NA	5.4
Mothers not receiving prenatal care in first trimester	NA	NA	16.1
Mothers with adequate prenatal care (a)	21	95.5	84.9
Mothers receiving publicly funded prenatal care (b)	NA	NA	35.8
	Area	Area	State
	Count	Rate	Rate
Lead poisoning cases (blood lead levels greater than	0	0.0	0.3
or equal to 25 μg/dL in children ages 6 mos - 5 yrs)			

Infant Mortality Rate (IMR) is expressed per 1,000 live births in the same data year

Lead poisoning rates are expressed per 1,000 children screened.

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2010 Births (Vital Records), 2010 Infant Deaths (Vital Records), 2010 Lead Poisoning Prevention Program

### **Infectious Disease for West Newbury**

	Area Count	Area Crude Rate	State Crude Rate
HIV/Incidence	NA	NA	8.6
HIV/AIDS	NA	NA	261.0
Prevalence			
AIDS and HIV-	0	0	1.8
related deaths			
Tuberculosis	0	0	3.7
Pertussis	0	0	5.8
Hepatitis-B	0	0	11.3
Syphilis	0	0	9.4
Gonorrhea	0	0	37.9
Chlamydia	0	0	322.1

Crude Rates are expressed per 100,000 persons

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2009 AIDS Surveillance Program, 2009 Division of Epidemiology and Immunization, 2009 Division of Tuberculosis Prevention and Control, 2010 Division of Sexually Transmitted Disease Prevention, 2010 Mortality (Vital Records) ICD-10 based

# **Injury for West Newbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Motor vehicle	1	23.6	5.8
related injury deaths			
Suicide	1	23.6	9.0
Homicide	0	0	3.1

Crude rates are expressed per 100,000 persons

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# **Chronic Disease for West Newbury**

Area Count Age-Adjusted Rate State-Adjusted Rate	•
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Total deaths (all causes)	20	492.2	667.8
Total cancer deaths	4	85.8	170.3
Lung cancer deaths	0	0	47.2
Breast cancer deaths	0	0	19.1
Cardiovascular	3	95.3	192.0
disease deaths			

Age-adjusted rates are expressed per 100,000 persons Copyright © 1995-2013 Massachusetts Department of Public Health 2010 Mortality (Vital Records) ICD-10 based

### **Hospital Discharge for Primary Care Manageable Conditions for West Newbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Asthma	NA	NA	160.2
Angina	NA	NA	10.3
Bacterial pneumonia	10	187.6	296.1

Age-adjusted rates are expressed per 100,000 persons Copyright © 1995-2013 Massachusetts Department of Public Health 2009 Calendar Year Hospital Discharges (UHDDS)

### **Substance Use for West Newbury**

	Area Count	Age-Adjusted Rate	State-Adjusted Rate
Admissions to DPH	15	348.7	1532.4
funded treatment			
programs			
Injection drug user	NA	NA	621.2
admissions to DPH			
funded treatment			
program			
Alcohol and other	NA	NA	344.7
drug related			
hospital discharges			

Crude rates are expressed per 100,000 persons

Age adjusted rates are expressed per 100,000 persons

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