## Results From The Community Health Needs Assessment: Part II

The Greater Brockton
Community Health Network

Area (CHNA)... Serving the Communities of:

Abington ■ Avon ■ Bridgewater ■ Brockton ■ East Bridgewater Easton ■ Holbrook ■ Stoughton ■ West Bridgewater ■ Whitman



Bonnie Andrews, Community Health Analyst
The Southeast Center for Healthy Communities,
a program of Health Imperatives
April 2011

### Introduction

- Assessment required by the Massachusetts Department of Public Health (DPH) Determination of Need (DoN) program
- Assessment should reflect the three statewide health priorities:
  - Eliminating racial and ethnic health disparities and their social determinants;
  - Promoting wellness in the home, workplace, school, and community;
  - Preventing and managing chronic disease.

### Methodology

- > Five-pronged approach:
  - 1. Collection and analysis of existing community health data;
  - 2. "Impressions sessions" with community residents;
  - 3. Key informant interviews with people who work in CHNA towns other than Brockton;
  - 4. A review of existing programs and services in the CHNA;
  - 5. Anonymous surveys left in locations around the CHNA.





### Previous Presentation

- During the last presentation, the following were reviewed:
  - Overview of CHNAs and Assessment Rationale
  - Methodology
  - Demographics
  - Housing and Homelessness
  - Health Care Access



### Presentation Part II

- During today's presentation, we will review the following topics:
  - Safety
  - Substance Use and Behavioral Health
  - Maternal and Child Health
  - Sexually Transmitted Infections and HIV/AIDS
  - Risk Behaviors and Health Screening
  - Chronic Illnesses
  - Community Impressions Sessions Themes
  - Key Informant Interview Themes



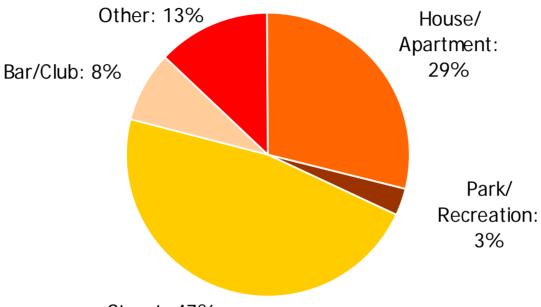
## Safety



### Assault-Related Injury and Homicide

- The age-adjusted mortality rate from homicide in the city of Brockton (9.2 per 100,000) was significantly higher than the state rate (2.8 per 100,000) from 2005 through 2007
- The age-adjusted mortality rate from homicide for CHNA towns not including Brockton was below the state rate during the same time period (0.73 per 100,000)
- The assault-related gunshot or sharp instrument injury rate for the city of Brockton was 92.4 per 100,000 in 2008, which was over three times the state rate of 30.1 per 100,000.

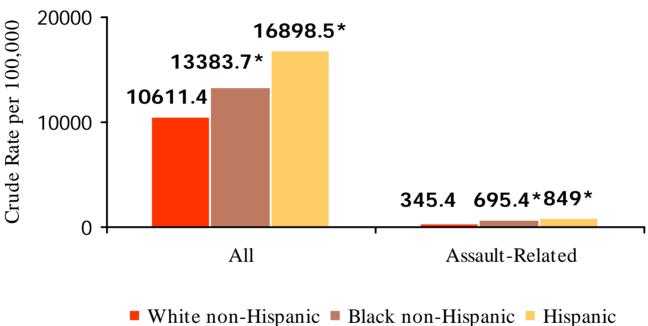
## Weapons-Related Injury Cases by Where Injuries Occurred (Excluding Unknown), Brockton CHNA, 2005-2007



Street: 47%

Data source: MassCHIP Weapons-Related Injury Surveillance System Dataset

#### Emergency department visits for injuries, by race/ethnicity, Brockton CHNA, 2005-2007



\*significantly higher than White non-Hispanic

Data source: MassCHIP Emergency Department Dataset

### Domestic Violence

- In the city of Brockton, over 3,000 people were survivors of domestic violence between 2007 and 2009.
- Outside the city, 2007-2009:
  - Bridgewater: 229 reported incidents from 2007-2009
  - East Bridgewater: 169 incidents between 2007-2009
- > Outside the city, in 2009:
  - Abington: 105 reported incidents
  - Whitman: 82 reported incidents
  - West Bridgewater: 38 incidents in 2009

### From the Community

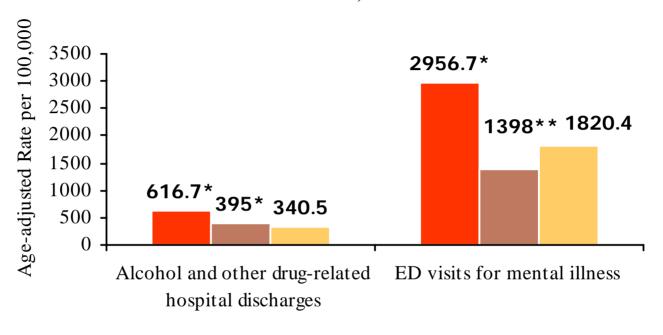
- Multiple participants from community impressions sessions cited safety as a concern in the city of Brockton. Themes included:
  - Gang activity;
  - Reduced police presence;
  - Boarded-up houses where people are doing drugs and teenagers are "hanging out;"
  - Trash on the ground everywhere, including condoms and needles (inside and outside of Brockton)



# Substance Use and Behavioral Health



### Hospitalization and ED visits for substance use and behavioral health, 2006-2008



■ Brockton City ■ Other CHNA Towns ■ MA Total

\*significantly higher than state rate

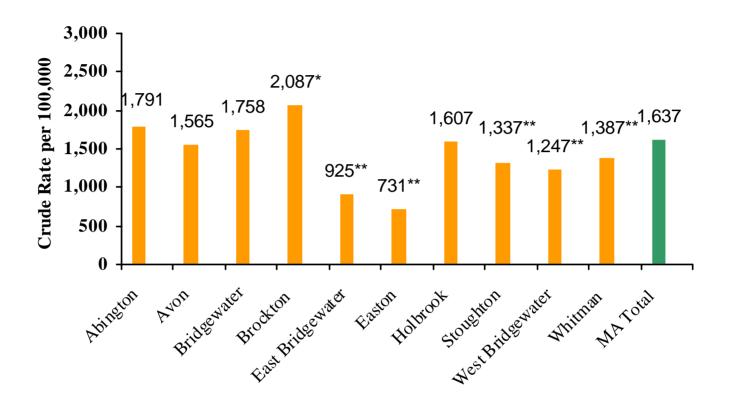
\*\*significantly lower than state rate

Data source: MassCHIP Emergency Department and Hospitalization datasets

## Opioid-related fatal overdoses and needle use

- From 2005 to 2007, the age-adjusted rate of opioid-related fatal overdoses in the city of Brockton (15 per 100,000) was significantly higher than the state rate (9 per 100,000).
- The city of Brockton (586 per 100,000) had a higher rate where a needle was used within a year of admission than the state overall (504 per 100,000) in 2007.

#### Admissions to BSAS-Funded Treatment Facilities, 2007



Data source: MassCHIP Bureau of Substance Abuse Services Treatment Admission Dataset

- \*significantly higher than state rate
- \*\*significantly lower than state rate

### From the Community

A common theme in community impressions sessions held throughout Brockton was that people were using substances to "escape" the stress of the economy.



### From the Community

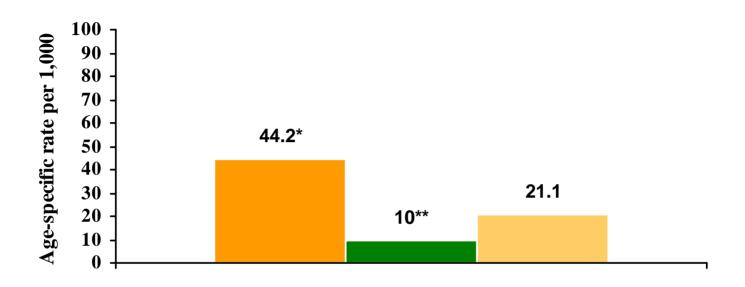
In discussions with key informants, the following themes emerged relating to substance use and behavioral health problems:

- Substance use among adolescents;
  - "Percentage-wise [there aren't] a lot, but the ones we have take a lot of our time because it's so difficult to kick the habit, they can go into treatment, but they still come out and they're still struggling."
- Mental health problems among people of all ages, but particularly adolescents;
- Substance use among people of all ages;
- Alcohol abuse among adults.

### Maternal and Child Health



#### Births among women age 15-19, 2006-2008



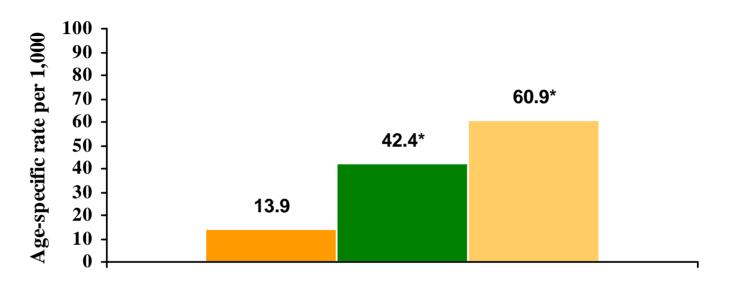
■ Brockton ■ Other CHNA Towns ■ State

\*\*Significantly lower than state rate

Data source: MassCHIP Natality Dataset

<sup>\*</sup>Significantly higher than state rate

### Births among women age 15-19, Brockton CHNA, 2006-2008

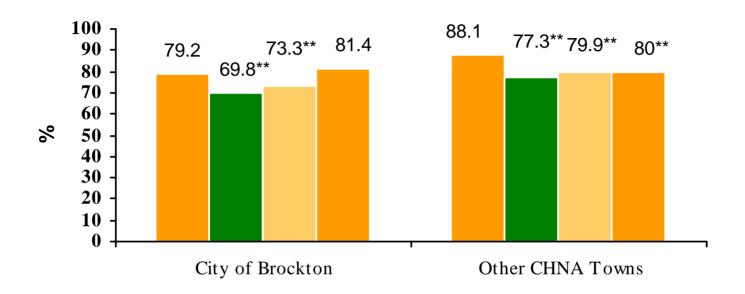


■ White non-Hispanic ■ Black non-Hispanic ■ Hispanic

\*Significantly higher than White non-Hispanic

Data source: MassCHIP Natality Dataset

#### Adequate prenatal care by race/ethnicity, city of Brockton, 2006-2008



■ White non-Hispanic ■ Black non-Hispanic ■ Hispanic ■ Asian

\*\*Significantly lower than White non-Hispanic

Data source: MassCHIP Natality Dataset

### Infant Mortality Rate

- From 2006-2008, the city of Brockton had a significantly higher infant mortality rate (8.3 per 1000) than the state overall (4.9 per 1000.)
- Other CHNA towns had approximately the same infant mortality rate (3.2 per 1000) as the state overall.

### Other Child Health Indicators

- The area rate of lead poisoning in CHNA towns other than Brockton from 2006-2008 was 0.4% of all children screened, which was the same as the MA rate of 0.4% of all children screened.
- The percentage in the city of Brockton (1.3%) was significantly higher than the state. In addition, 4.1% of children screened for lead in the city of Brockton had elevated blood lead levels, which was significantly higher than the state rate of 1.8%.
- None of the communities in the CHNA have water fluoridation, which has important indications for oral health



### From the Community

- The "village raises a child" mentality of previous generations no longer exists because people fear retribution or don't trust others.
- Summer and after-school programs are "expensive" and often have waiting lists, so they are inaccessible to many adolescents;
- Parents do not want to let their children outside with "needles, trash, and broken bottles" on the ground.



# Sexually Transmitted Infections and HIV/AIDS

### HIV/AIDS

- From 2005-2007, Brockton was the 10th highest city for average annual diagnosis rate of HIV in Massachusetts
- The non-Hispanic Black population of Brockton has been disproportionately affected by HIV/AIDS. While 31.1% of the city's residents identify as non-Hispanic Black according to estimates from the Massachusetts Department of Public Health, 64% of newly diagnosed cases of HIV/AIDS in Brockton were in non-Hispanic Black residents

### Sexually Transmitted Infections

- Among adolescents age 15-19, there were 252 new cases of Chlamydia in the CHNA in 2008, which was significantly higher than the state rate for this age group. 204 of these new cases of Chlamydia were from the city of Brockton.
- There were 34 new cases of gonorrhea in the CHNA among adolescents age 15-19 in 2008, of which 26 cases were from the city of Brockton. The rates for these infections in the city of Brockton were 2-3 times that of the state for this age group.

### From the Community

Multiple key informants stated that they would like to see additional sexual education taking place at an earlier age than high school.

# Risk Behaviors and Health Screening

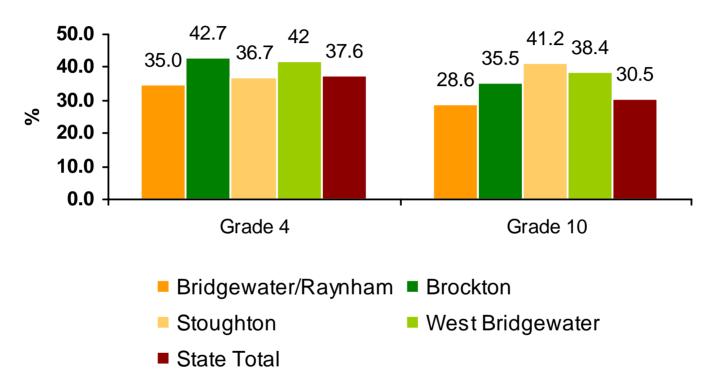




Risk Factors in the CHNA		
	CHNA Percent (95% CI)	State Percent (95% CI)
Overweight/obese	57.2% (52.7-61.7)	58.2% (57.4-58.9)
Any leisure time physical activity, past 30 days	75.8% (71.7-79.9)	78.7% (78.1-79.2)
At least five servings of fruits/vegetables per day	20.9% (16.8-25.0)	26.9% (26.1-27.6)

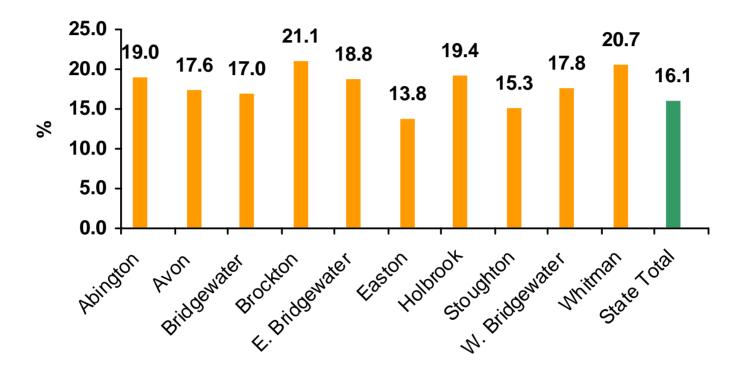
Data source: McKenna M Tinsley L et al (2010). A Summary of Health Risks and Preventive Behaviors in Community Health Network Areas (CHNAs) 2007-2009. Available from: http://www.mass.gov/dph/hsp.

### Percentage of students in public schools who were overweight or obese, 2008-2009 school year



Data source: "The Status of Childhood Weight in Massachusetts, 2009" Massachusetts
Department of Public Health

### Percentage of adults age 18 and older who are current smokers, 2008



Data source: Massachusetts Tobacco Control Program

### Adults age 40 and Older

- Approximately the same percentage of people age 65 and older living in the CHNA (70%) reported that they had obtained a flu vaccination in the past year as residents of the state overall (75%)
- Approximately the same percentage of CHNA residents age 50 and older reported that they had received a colonoscopy or sigmoidoscopy in the past five years (61%) as residents of the state overall (64%)
- Approximately the same percentage of female residents of the CHNA age 40 and older (83%) reported that they had a mammogram in the past two years as female residents of the state overall in the same age group (85%)

### From the Community

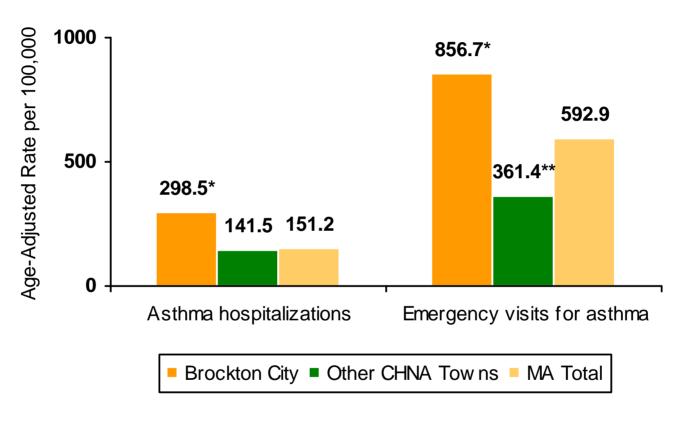
> Though many residents both inside and outside of Brockton cited playgrounds, parks, and local school sports and summer activities as ways to encourage children to be physically active, the cost of participating in these programs was often cited as a barrier to participation.



### Chronic Illnesses



#### Asthma, 2006-2008

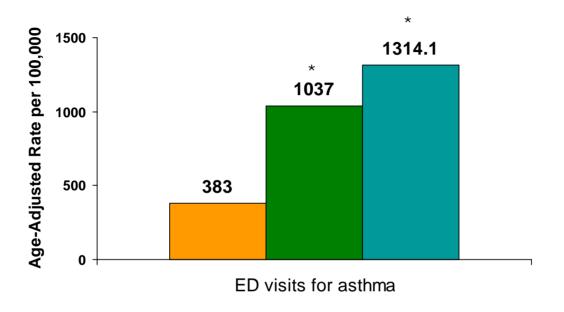


\*Higher than state rate
\*\*Lower than state rate

Data source: MassCHIP Emergency
Department and Hospitalization datasets



#### ED visits for asthma, by race/ethnicity, Brockton CHNA, 2006-2008

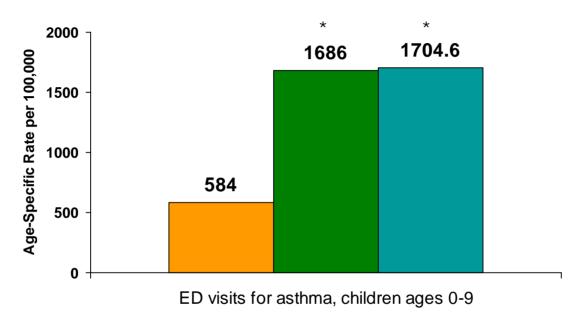


■ White non-Hispanic ■ Black non-Hispanic ■ Hispanic

\*significantly different from White non-Hispanic

Data source: MassCHIP 2006-2008 emergency department visits

#### ED visits for asthma, by race/ethnicity, Brockton CHNA, 2006-2008

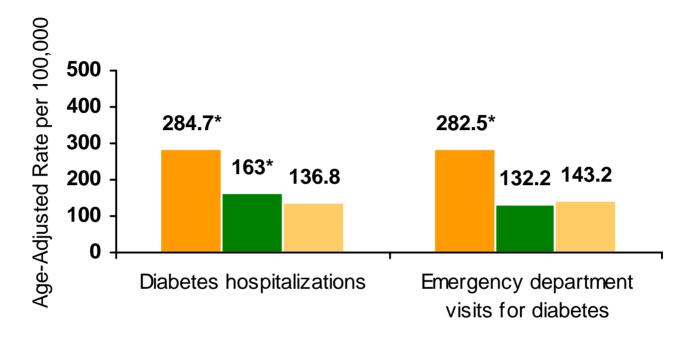


■ White non-Hispanic ■ Black non-Hispanic ■ Hispanic

\*significantly different from White non-Hispanic

Data source: MassCHIP 2006-2008 emergency department visits

#### **Diabetes, 2006-2008**

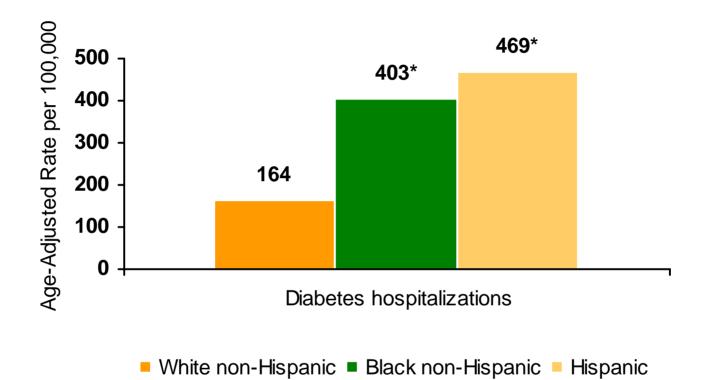


■ Brockton City ■ Other CHNA Towns ■ MA Total

Data source: MassCHIP emergency department visits and hospitalization datasets, 2006-2008

<sup>\*</sup>significantly higher than state

#### Diabetes hospitalizations, 2006-2008



<sup>\*</sup>significantly higher than White non-Hispanic

Data source: MassCHIP emergency department visits and hospitalization datasets, 2006-2008

### From the Community

Many key informants in CHNA towns outside of Brockton identified the following chronic health problems in area residents:

- Childhood asthma, which tends to be bettercontrolled among the high-school-age population;
- Type II diabetes in adults;
- Life-threatening allergies in children;
- Lyme disease;
- Oral health problems;
- Tuberculosis—infected people from outside the US;
- Dementia and Alzheimer's disease in older adults.

### From the Community

During conversations with key informants outside of the CHNA, the following themes emerged related to risk behaviors for chronic illnesses:

- Childhood obesity;
- Lack of exercise both among children and adults;
- Obesity in adults;
  - "What I observe is a phenomenal amount of obesity, across the board."
- Parents have no time to be active or fix healthy meals due to being stressed, working, or otherwise busy.

### Discussion Session Summary





Image created using Wordle, www.wordle.net



### Key Informant Interview Summary





Image created using Wordle, www.wordle.net



#### What's Next for CHNA 22?

- Developing a list of priority health issues based on the following criteria:
  - People in the Greater Brockton CHNA see this as a problematic issue.
  - There is quantitative data for this issue that demonstrates that the issue is a serious problem within the Greater Brockton CHNA.
  - Addressing this issue will lead to an improvement in health outcomes with the potential to make a positive impact on the community.
- Sending this list out to the CHNA general membership to vote upon

## Acknowledgements



### Impressions Sessions Hosts

**Activate Easton Brockton Neighborhood Health Center Brockton Parents' Academy** Lincoln Technical Institute Self-Help, Inc. in collaboration with the Cape Verdean Association Signature Healthcare Brockton Hospital Stoughton Council on Aging



# The Greater Brockton CHNA Community Health Assessment Subcommittee

Linda Barros, Self-Help, Inc. **Bonnie Black, Lincoln Technical Institute Ruth Blais, Salvation Army** Amy Bourkiche, Stoughton Visiting Nurses/Council on Aging Nancy DeLuca, Signature Healthcare Brockton Hospital Jean-Paul Despres, South Bay Mental Health Mary Eager, Salvation Army John Eastman, Self-Help, Inc. **Matt Elliott, Lincoln Technical Institute** Maria Evora-Rosa, Massachusetts Department of Public Health Hilary Lovell, Signature Healthcare Brockton Hospital Kerrin Miniutti, Lincoln Technical Institute Robert Retalic, Lincoln Technical Institute Robert Short, Caritas Good Samaritan Hospital Teresa Tapper, Stoughton Youth Commission/Council on Aging **Brenda Viveiros, BMC Health Net Plan** 

Thank you.

Questions?