COMMUNITY HEALTH PROFILE

Health Service Delivery Area A
(South and South East)
2014

Houston Department of Health and Human Services

Houston Department of Health and Human Services

Strategic Goals of the Houston Department of Health and Human Services

- Goal 1. Protect the Community from Disease

- Goal 2. Prepare for, Respond to and Recover from Disasters

- Goal 3. Increase Opportunities for Healthy Living

- Goal 4. Give Children a Healthy Start

- Goal 5. Align Services with National Mandates and Standards

- Goal 6. Demonstrate Organizational Excellence

- Goal 7. Reduce Health Disparities

Area A and City of Houston

July 16, 2014

Welcome to the first set of Health Service Delivery Area Profiles of the Houston Department of Health and Human Services (HDHHS). HDHHS has created three health service delivery areas, comprised of contiguous Super Neighborhoods, to implement a new model of service delivery based on decentralization. Decentralization has allowed public health programs and staff to maintain a constant presence in the area, resulting in public health becoming more 'embedded' in the community.

We hope that the health profile for the Health Service Delivery Area A (South and South-East part of the City of Houston, hereafter referred to as Area A) will serve as a resource to the community, to our internal and external stakeholders and to partners that work with HDHHS tirelessly, to improve population health in the City of Houston. This report provides a snapshot of health conditions and the sociodemographic profile of residents living in Area A. For a list of the Super Neighborhoods included in Area A, please see the last page of this report.

Sincerely,

Stephen L. Williams, M.Ed., M.P.A.

Director, Houston Department of Health and Human Services

City of Houston

Profile Objectives

- To provide data to internal and external stakeholders and partnering organizations.

- To help prioritize health issues in need of evidence-based interventions.

- To provide a baseline reference for which changes in health indicators can be measured.

- To provide actionable recommendations when appropriate for planning, designing, implementing and evaluating public health programs and interventions.

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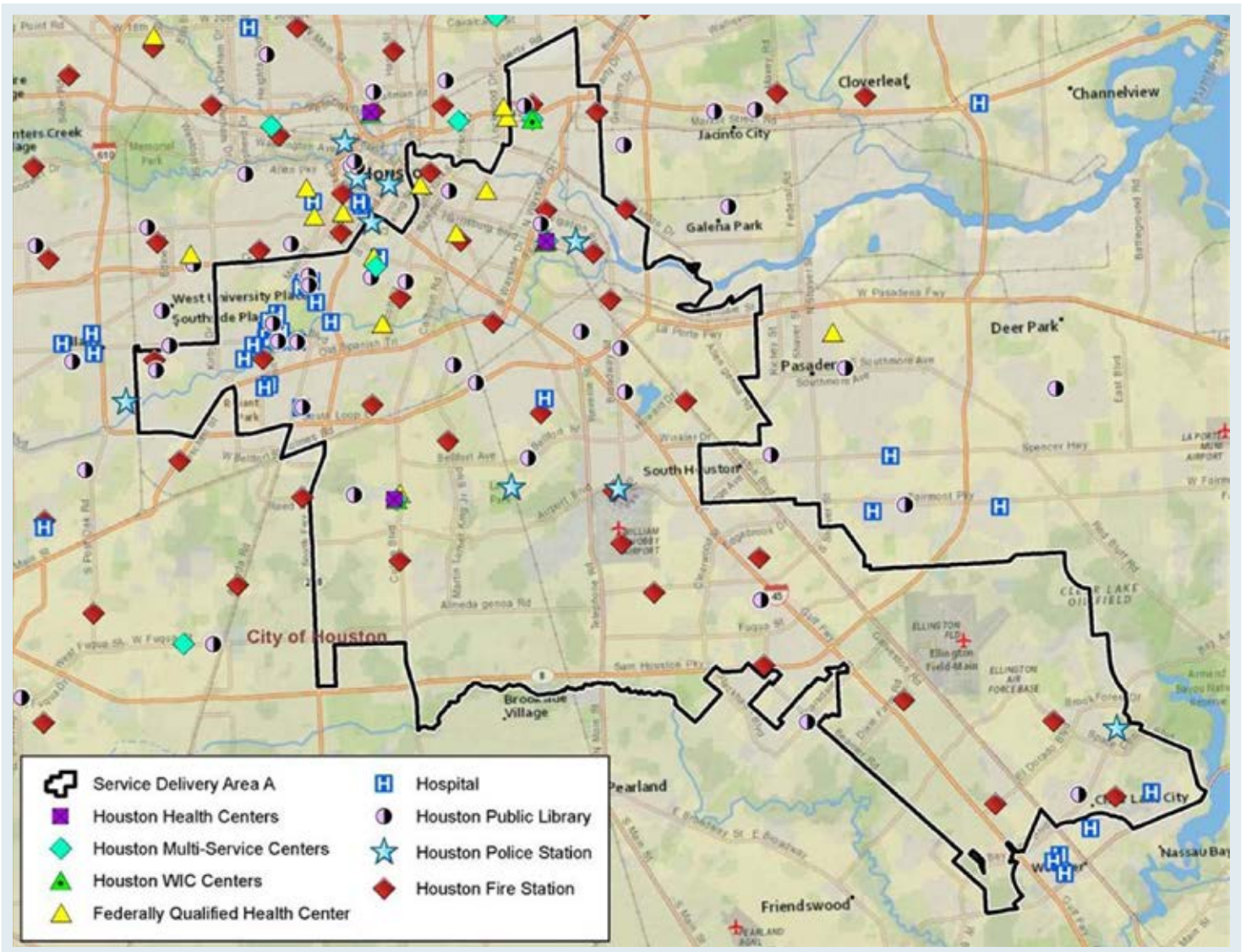
Acknowledgments

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Houston Department of Health and Human Services 2014

Community Resource Map

Legend:
- Service Delivery Area A
- Houston Health Centers
- Houston Multi-Service Centers
- Houston WIC Centers
- Federally Qualified Health Center
- H Hospital
- Houston Public Library
- Houston Police Station
- Houston Fire Station

This map presents selected community resources in Area A. This information is dynamic and may change at anytime. The information captured here is accurate to the best of our knowledge at the time this profile was published.
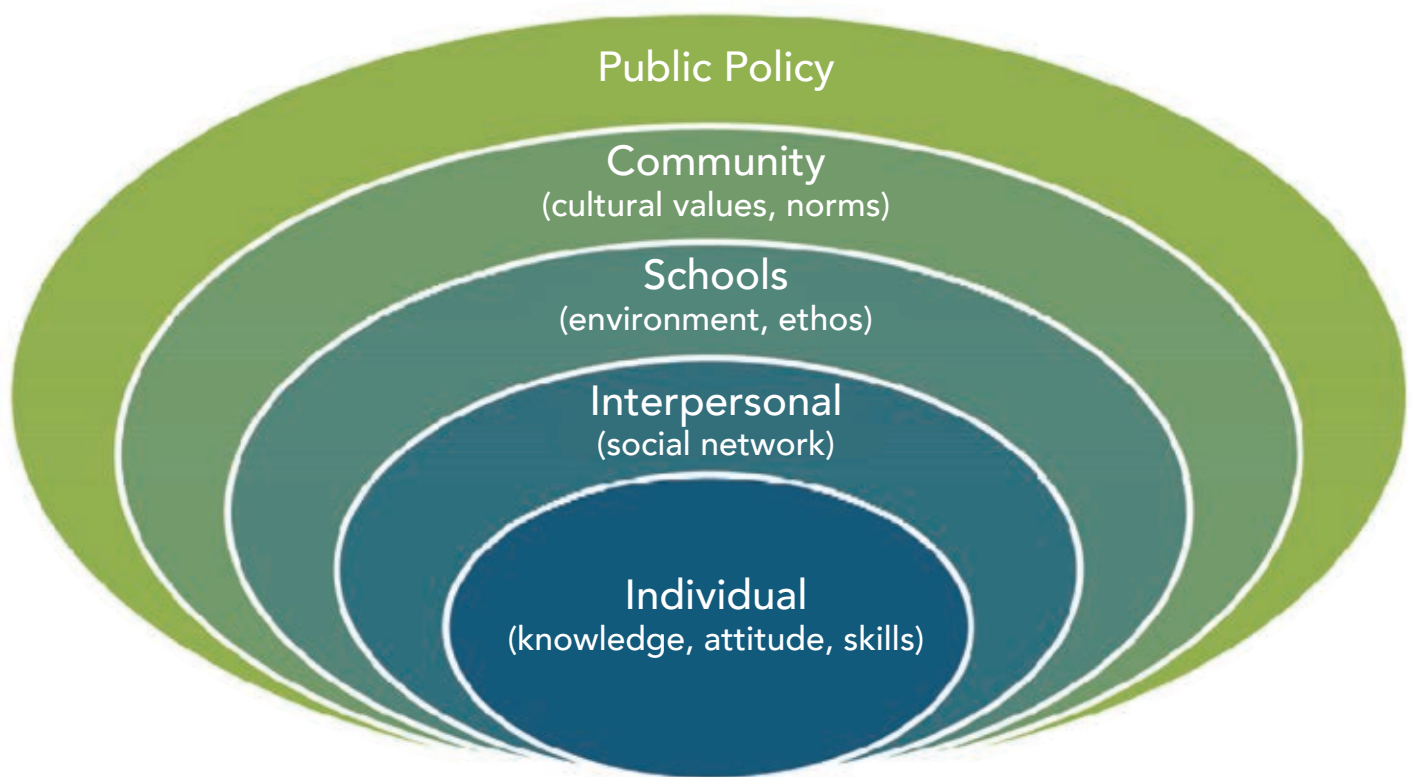
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Introduction

The health of individuals, communities, and jurisdictions are mainly influenced by economic and social conditions known as the social determinants of health. These conditions can shape how a person uses physical, social, and personal resources to identify and achieve goals, fulfill their needs, and manage within their environment (Raphael, 2009).

This health profile uses a health equity lens, recognizing that health is a fundamental human need and therefore, a basic human right. Health is influenced by a complex interplay between societal conditions, biological and behavioral factors. This profile presents information in many of these areas to describe a collection of factors affecting health – aligned to a social ecological model, as shown below.

Public Policy

Community
(cultural values, norms)

Schools
(environment, ethos)

Interpersonal
(social network)

Individual
(knowledge, attitude, skills)

> *It is critical to address health where people live, learn, work and play in order to give those at risk the best opportunity to live healthy productive lives.*
>
> Robert Wood Johnson Foundation

Introduction

Organization of this Profile:

The City of Houston, the fourth largest city in the U.S., lies in Harris County, which is the most populous county in Texas with a vast geographic spread of 1,703 square miles and a population of 4.1 million in 2010. Established in 1840, the City of Houston Department of Health and Human Services (HDHHS) has grown to a department of approximately 1,100 employees. HDHHS is the public health authority for the City of Houston and provides core public health services to Houston residents such as disease surveillance; air and water quality monitoring; restaurant inspections; lead paint safety; cancer screening; family planning for the uninsured; communicable disease prevention and control; birth and death certificates; leadership during emergencies such as hurricanes; services to seniors; WIC programs; immunizations and others. HDHHS operates 11 multi-service centers, 5 health centers, 14 WIC (Women, Infants and Children nutrition program) sites, the Harris County Area Agency on Aging, a comprehensive regional reference laboratory, and more than 50 health and human service programs.

HDHHS provides services in three health service delivery areas (referred to as Areas A, B, and C). These areas were designated in 2010 and are aggregations of contiguous Super Neighborhoods (which are themselves aggregations of residential subdivisions, and hereinafter referred to simply as "neighborhoods") used to decentralize department services and make health service delivery more manageable. This profile presents a quantitative snapshot of the most recently available data on selected health indicators for Area A. This profile focuses on socio-demographic conditions, access and utilization of care, prevalence and incidence of certain diseases, behaviors that increase the risk of poor health, and quality of life.

The information presented synthesizes the most recently available data from multiple sources. Data on the above areas is organized in sections. Each section is followed by recommendations for action to improve health outcomes in Area A.

Technical Notes:

- Presenting average indicators, such as average income, at the Area level is likely to mask the true picture of conditions in some neighborhoods because each Area combines lower and higher income neighborhoods. The socio-economic data presented here are derived from the American Community Survey (ACS) five-year estimates (2007-2011) with some supporting information pulled from the U.S. Census 2010.

- The City of Houston, Harris County, and State of Texas indicators are used as reference groups to compare data. The Behavioral Risk Factor Surveillance System (BRFSS) data is compared to the City of Houston as a reference and Health of Houston (HHS) data is compared to Harris County.

- Much of the data comes from complex and weighted cross-sectional survey data, thus, crude point prevalence rates are presented in many cases.
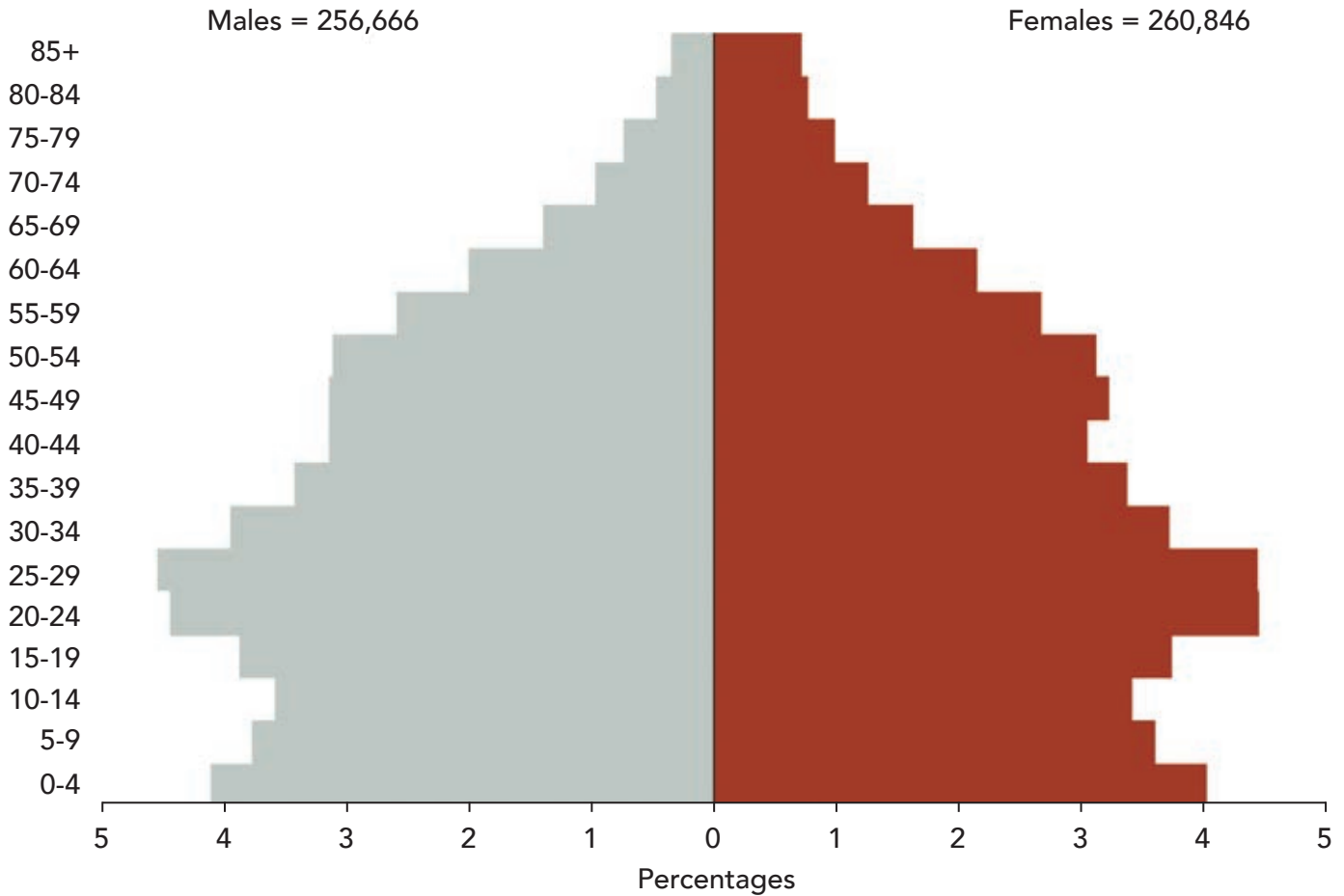
Socioeconomic Conditions and Access to Care

◆ Demographics

◆ Household Characteristics

◆ Poverty

◆ Income and Benefits

◆ Education

◆ Employment Status and Occupational Categories

◆ Health Insurance

◆ Medicaid

◆ Access to Care

Demographics

## Age Pyramid by Gender

Area A Total Population = 517,512

Males = 256,666   Females = 260,846

Percentages

The age pyramids for Area A and the City of Houston are represented as a horizontal bar graph that shows the percentage of males in each age group on the left side and the percentages of females on the right. The age categories are grouped into five year increments, with the youngest in the population located at the bottom (U.S. Census Bureau, 2010).

City of Houston

The age distribution pyramids show that both Area A and the City have high proportion of young people. About half of residents in Area A are under the age of 30. The highest percentage of residents fall within the 20 to 29 age groups, representing nearly 100,000 residents. The age distribution in Area A is comparable to that of the City of Houston.
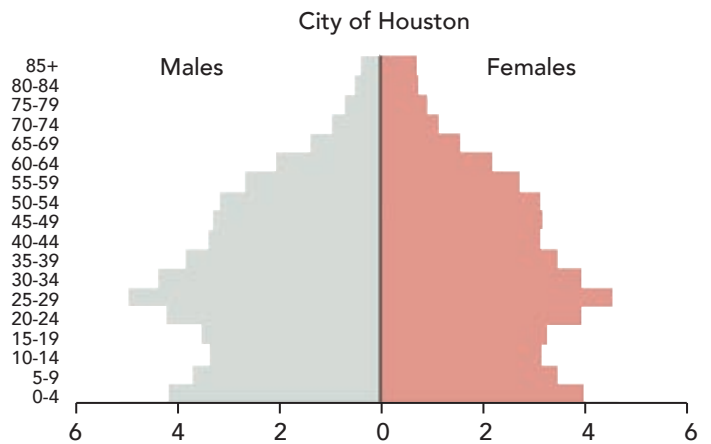
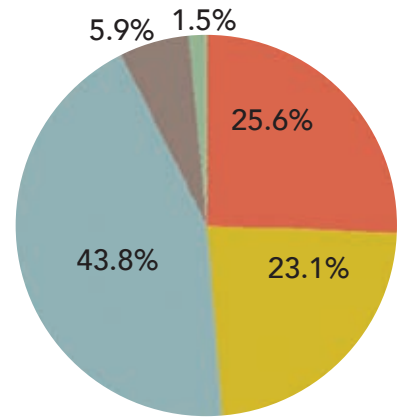Data Source: U.S. Census Bureau, 2010

Demographics and Household Characteristics

Race / Ethnicity

Area A

6.1% 1.3%

19.6%

48.3% 24.7%

Legend:
- White
- Black
- Hispanic
- Asian
- Other
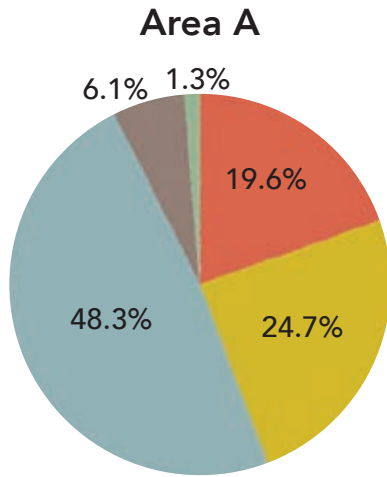
The total population of Area A is 517,512 and about half (more than 250,000 residents) are from Hispanic descent.
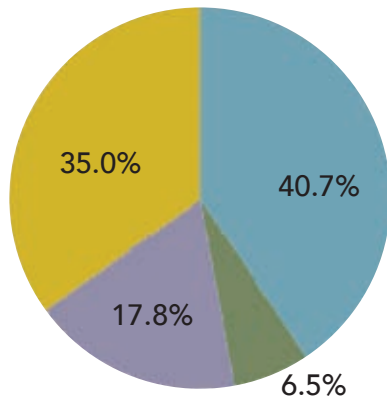
City of Houston

5.9% 1.5%

25.6%

43.8% 23.1%

The total population of the City of Houston is 2,099,451. Hispanics comprise the largest racial/ethnic group in the City, representing approximately 44 percent of the population.

English is the primary language spoken at home for more than 50 percent of households in Area A and the City of Houston. The second most frequently spoken language is Spanish or Spanish Creole.

Household Types for Area A

35.0%

40.7%

17.8%

6.5%

- Married-couple family household
- Male householder, no wife present
- Female householder, no husband present
- Non-family household

A family household is defined as one which is maintained by a householder and includes individuals related by birth, marriage, or adoption. It may also include unrelated individuals living in the home (U.S. Census Bureau, 2012a). A non-family household refers to a householder living alone or sharing the home with non-relatives only (U.S. Census Bureau, 2012b). Similar to the City of Houston, the majority of households in Area A either contain married couple families (40.7%) or are non-family households (35.0%).

In terms of marital status, Area A is very similar to Houston as a whole. The majority of residents in Area A are either currently married (42.7%) or have never been married (38.7%). Another 13.1 percent are either divorced or separated and 5.3 percent are widowed.

Data Source: U.S. Census Bureau, 2010

Poverty

United States (U.S.) Census Bureau uses a set of poverty thresholds to estimate the annual income needed for a given family to meet basic needs. The poverty threshold or poverty line varies by family size and composition. A family is considered poor if their annual income is less than the poverty threshold (U.S. Census Bureau, 2012c). Approximately 22 percent of the population in Area A live below the poverty line.

Poverty By Race/Ethnicity (Rate per 1,000 Population)

| Race/Ethnicity	Poverty Rates		
	Area A	City of Houston	Texas
Hispanics	243.6	273.6	259.1
Blacks	281.2	278.6	235.9
Asian & Other*	219.1	229.6	207.2
White, Non-Hispanic	91.5	75.5	87.3
All	218.1	214.9	170.4

* Note: Asian & Other is the combination of the following race groups, regardless of Hispanic or Latino origin:
- Asian Alone
- American Indian & Alaska Native Alone
- Native Hawaiian & Other Pacific Islander Alone
- Some Other Race Alone
- Two or More Races

The poverty rate of Area A is comparable with that of Houston, and higher than that of the state of Texas. The poverty rate among minorities in Houston is higher than that of Texas. In Houston and in Area A, the rates of poverty are two to three times higher for minorities than for White non-Hispanics.

In Area A, the poverty rates among Blacks (281.2 per 1,000 population) and White non-Hispanics (91.5 per 1,000) are higher than for the same groups in Houston as a whole, and the state of Texas.

Ratio of Income to Poverty Level in Area A

- 24.7%
- 21.8%
- 53.5%
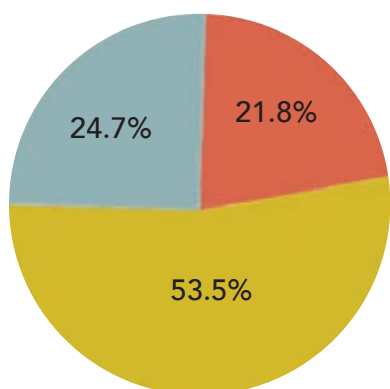
- 200% of Poverty Line and Above
- Above the Poverty Line but less than Twice Poverty
- Below Poverty Line

Many residents in Area A have annual earnings at least two hundred percent or more above the poverty line (53.5%). The average household income for Area A is $62,053 compared to $70,029 in the City of Houston. The average household income for the area should be interpreted with caution because approximately a fifth of the residents in Area A (approximately 125,000) live below the poverty line.

Neighborhoods where at least 20 percent of residents are living below the poverty level are considered impoverished communities (U.S. Census Bureau, 2011). Of the 27 neighborhoods in Area A, 18 are considered impoverished. More than 260,000 people live in these impoverished communities in Area A. Two of these neighborhoods (Greater Third Ward and Minnetex) are considered to be extremely impoverished, where at least 40 percent of residents live below the poverty line (U.S. Census Bureau, ACS, 2007-2011).

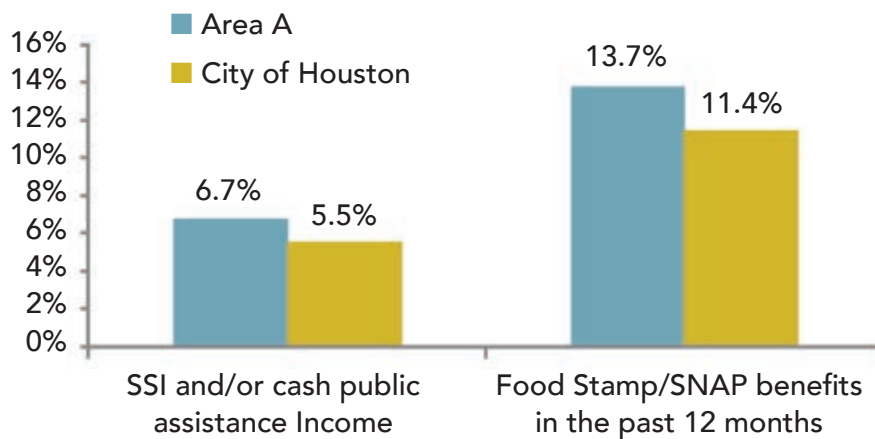Data Source: ACS, 2007-2011, U.S. Census 2010

Income and Benefits

According to the U.S. poverty guidelines for 2013, the annual income for a family of four living at 100 percent of the federal poverty threshold is $23,550 (U.S. Department of Health and Human Services, 2013).

Income Among Households (In 2011 Inflation-Adjusted Dollars)

Area A

City of Houston

Area A: 16.9%, 12.9%, 11.9%, 14.6%, 16.7%, 26.9%

City of Houston: 15.1%, 13.0%, 12.3%, 14.5%, 16.4%, 28.7%

Legend:
- Less than $15,000
- $15,000 to $24,999
- $25,000 to $34,999
- $35,000 to $49,999
- $50,000 to $74,999
- $75,000 and above

In Area A, a higher proportion of residents earned less than $15,000 annually than those in the City of Houston. This represents over 16.9% of the population in Area A. However, the annual income of the majority of residents in Area A exceeds the poverty threshold.

Households Receiving Government Benefits

Legend: Area A, City of Houston

SSI and/or cash public assistance Income: Area A 6.7%, City of Houston 5.5%

Food Stamp/SNAP benefits in the past 12 months: Area A 13.7%, City of Houston 11.4%

Compared to the City of Houston, higher proportions of households in Area A received benefits for Supplemental Security Income (SSI) /Cash Public Assistance and Food Stamp/Supplemental Nutrition Assistance Program (SNAP).

Note: Households are counted twice if they receive both Supplemental Security Income (SSI) and cash public assistance.

Data Source: ACS, 2007-2011

Education

"Educational attainment refers to the highest level of education an individual has completed" (U.S. Census Bureau, 2013). The Center for Disease Control and Prevention (CDC, 2011a) Health Disparities and Inequalities Report found striking disparities exist in education and poverty among the U.S. adult population. Analysis of low income families showed that non-high school graduates earned less than others living below the federal poverty level (Poverty Income Ratio <100%) (CDC, 2011a).

Among the 18 neighborhoods that are considered impoverished in Area A, up to 70 percent of the adult population (25 and over) have less than a high school education. Of the neighborhoods in Area A, Magnolia Park, Denver Harbor/Port Houston, Harrisburg/Manchester, Second Ward, Pecan Park, and Gulfgate Riverview/Pine Valley had the highest proportions of adults who did not finish high school (between 60 and 70 percent).
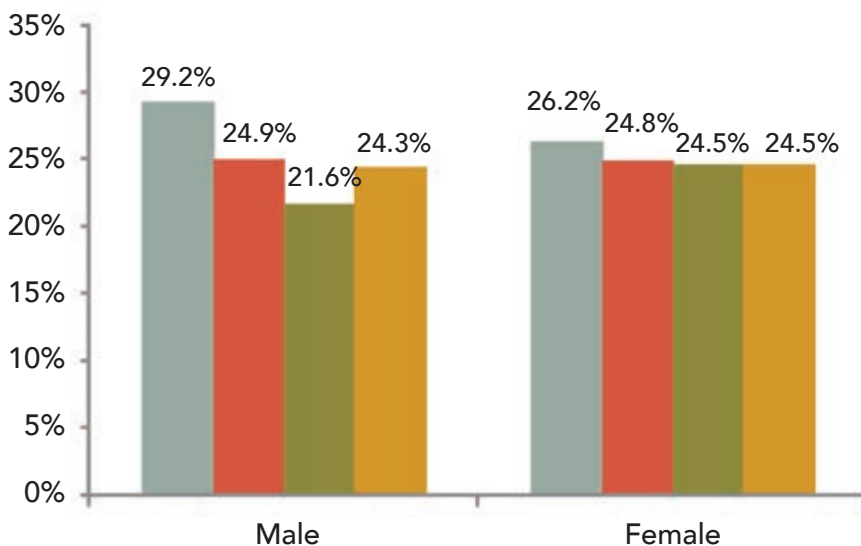
Educational Attainment for Area A
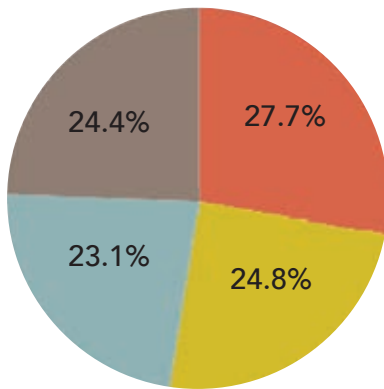
- Less than high school graduate
- High school graduate (includes equivalency)
- Some college, associate's degree
- Bachelor's degree or higher

Similar to City of Houston, educational attainment for adults (25 and older) in Area A is nearly equally divided into the four attainment categories. More than half of the adult population in Area A (52.5%) have no college education.

Educational Attainment for Area A (By Gender)

- Less than high school graduate
- High school graduate (includes equivalency)
- Some college, associate's degree
- Bachelor's degree or higher

In Area A, a slightly higher proportion of males than females (age 25 and older) have not completed a high school education.

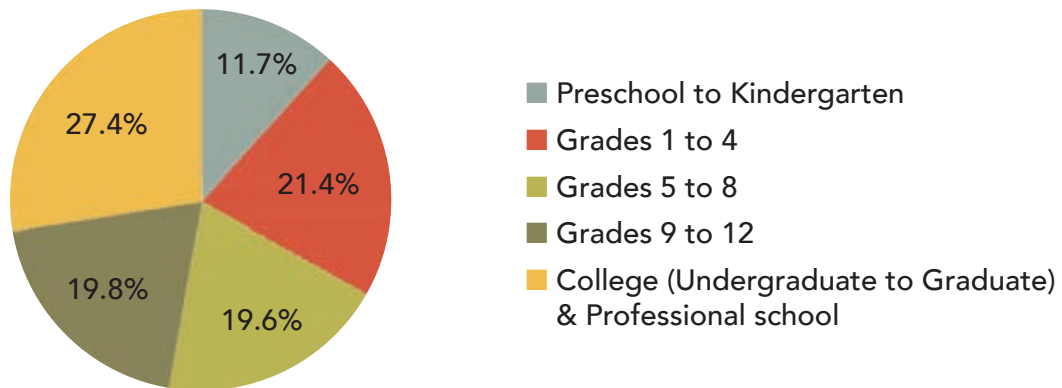Data Source: ACS, 2007-2011, U.S. Census 2010

Education

Educational Attainment for Area A (By Poverty Status)

Education Level	Income in the Past 12 Months	
	Below Poverty	At or Above Poverty
Less than High School Graduate	48.0%	23.8%
High School Graduate or Equivalent	27.2%	24.5%
Some College, Associate's Degree	18.2%	24.2%
Bachelor's Degree or Higher	10.2%	27.5%

Note: The estimates above may not add to 100% because of the difference between the population for whom poverty status is known and the total population.

When comparing educational attainment by income status for those living in poverty, the largest difference is found between non-high school graduates and those with a bachelor's degree or higher. In Area A, of those living below the poverty line, about half have not completed high school (48.0%) and just over 10 percent have earned a bachelor's degree or higher. Among those living at or above the poverty line, educational attainment is more evenly divided between the educational attainment categories.

School Enrollment for Area A

11.7% — Preschool to Kindergarten
21.4% — Grades 1 to 4
19.6% — Grades 5 to 8
19.8% — Grades 9 to 12
27.4% — College (Undergraduate to Graduate) & Professional school

- Preschool to Kindergarten
- Grades 1 to 4
- Grades 5 to 8
- Grades 9 to 12
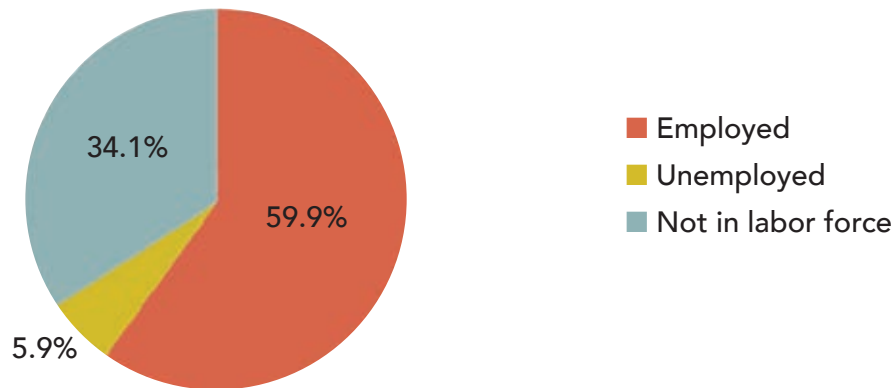- College (Undergraduate to Graduate) & Professional school

Of those currently enrolled in school in Area A, little more than one-quarter (27.4%) have completed high school and are enrolled in higher education. In City of Houston, 23.2% of residents are enrolled in college and professional school.

Data Source: ACS, 2007-2011

Employment Status and Occupational Categories

Employment Status for Area A

- **Employed**
- **Unemployed**
- **Not in labor force**

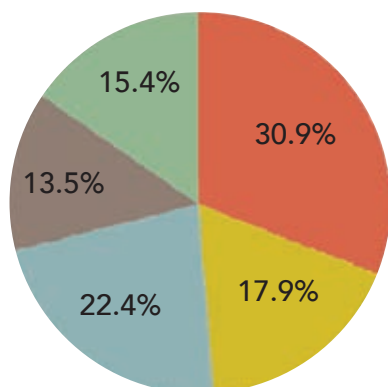59.9% — Employed
5.9% — Unemployed
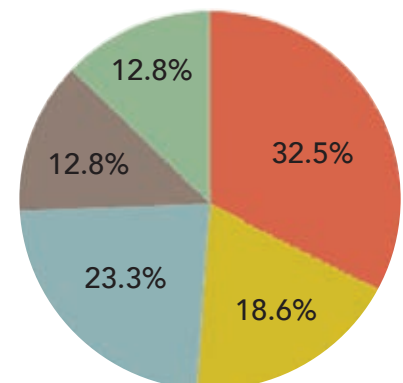34.1% — Not in labor force

Similar to the City of Houston:

◆ Almost two-thirds of the residents (age 16 and above) in Area A are employed and about 30.9 percent of the employed residents work in management, business, science, or art positions compared to about 32.5 percent in the City of Houston.

◆ Residents (age 16 and above) in Area A who are unemployed or not considered part of the work force comprise 40.0 percent of the population compared to 37.6 percent in the City of Houston.

◆ Similar to the City, less than 30.0 percent of Area A employed residents hold positions in physically laborious or hazardous occupations such as construction, maintenance, natural resources, production and material moving.

Occupation Types

Area A

15.4%
13.5%
22.4%
17.9%
30.9%

- **Management, business, science, and art occupations**
- **Service occupations**
- **Sales and office occupations**
- **Natural resources, construction, and maintenance occupations**
- **Production, transportation, and material moving occupations**
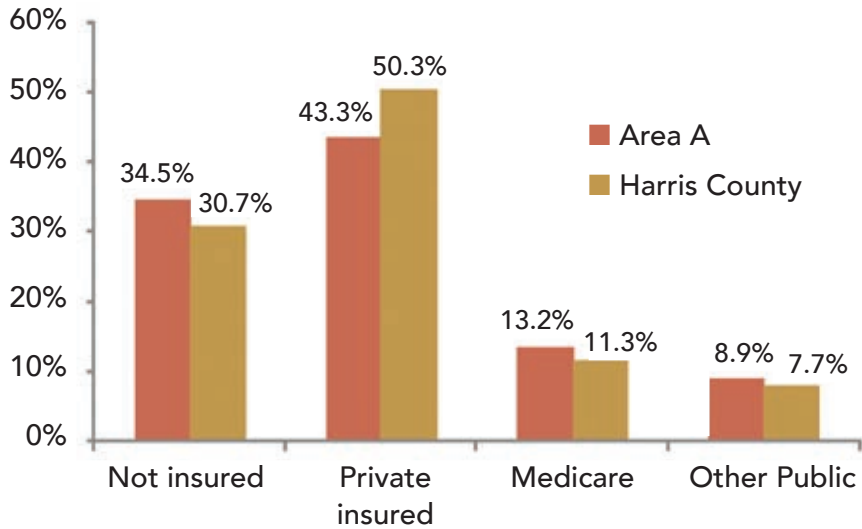
City of Houston

12.8%
12.8%
23.3%
18.6%
32.5%

Data Source: ACS, 2007-2011

Health Insurance

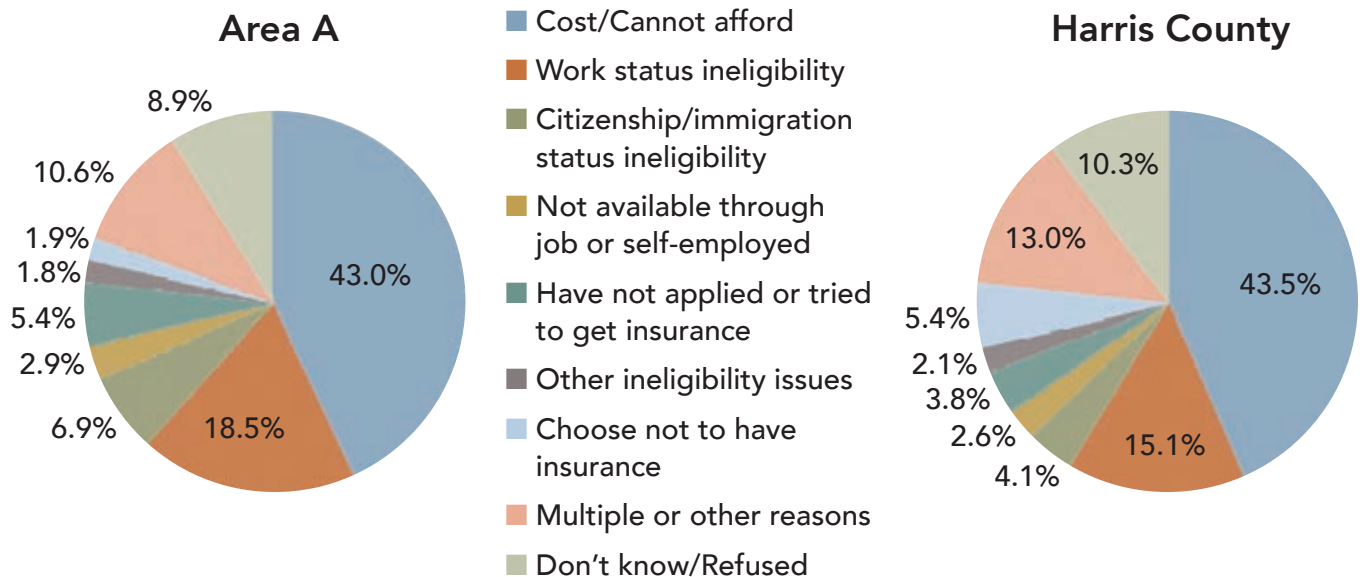## Type of Health Insurance

Starting in 2014, the Affordable Care Act started providing more affordable coverage, which is expected to result in increased access to care by decreasing health care cost, by offering free recommended preventive services, and by providing more health insurance options. (The White House, n.d.)

Note: Other public health insurance types do not include Harris Health Financial Assistance Program (previously called Gold card) recipients.

A smaller proportion of residents in Area A have private health insurance coverage compared to Harris County (43.3% vs. 50.3%). Approximately 22 percent are on Medicare or other public insurance options, and over one-third of residents in Area A are uninsured. The most common reason for residents in both Area A and Harris County being uninsured is the insurance cost.

Reasons for not being Insured

Area A

Harris County

- Cost/Cannot afford
- Work status ineligibility
- Citizenship/immigration status ineligibility
- Not available through job or self-employed
- Have not applied or tried to get insurance
- Other ineligibility issues
- Choose not to have insurance
- Multiple or other reasons
- Don't know/Refused

Data Source: HHS, 2010

Medicaid

## Medicaid Enrollees 65 years and Older

Slightly more than one-fifth (21.9%) of all adults, 65 years and older in Area A are enrolled in Medicaid, compared to 19.9 percent in Harris County during the 2012 state fiscal year (SFY).

For those 65 years and older, Hispanics in Area A and Harris County have the highest rate of Medicaid enrollment followed by Blacks. The lowest rates are among Whites. Because of their age, these enrollees are also eligible for Medicare.

For each racial/ethnic group, rates of enrollment are higher in Harris County than Area A, except among Whites. In Area A, the rate of enrollment among White residents 65 years and older is 88.6 per 1,000 individuals compared to 74.2 in Harris County.
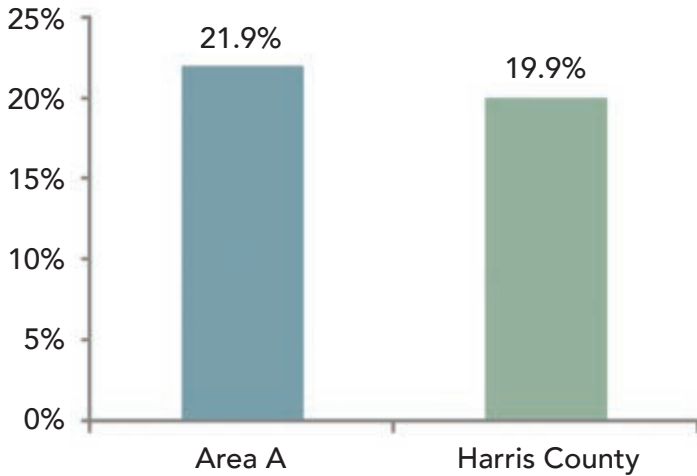
Medicaid Enrollment for 65 years and Older By Race/Ethnicity (Rates per 1,000 Individuals)
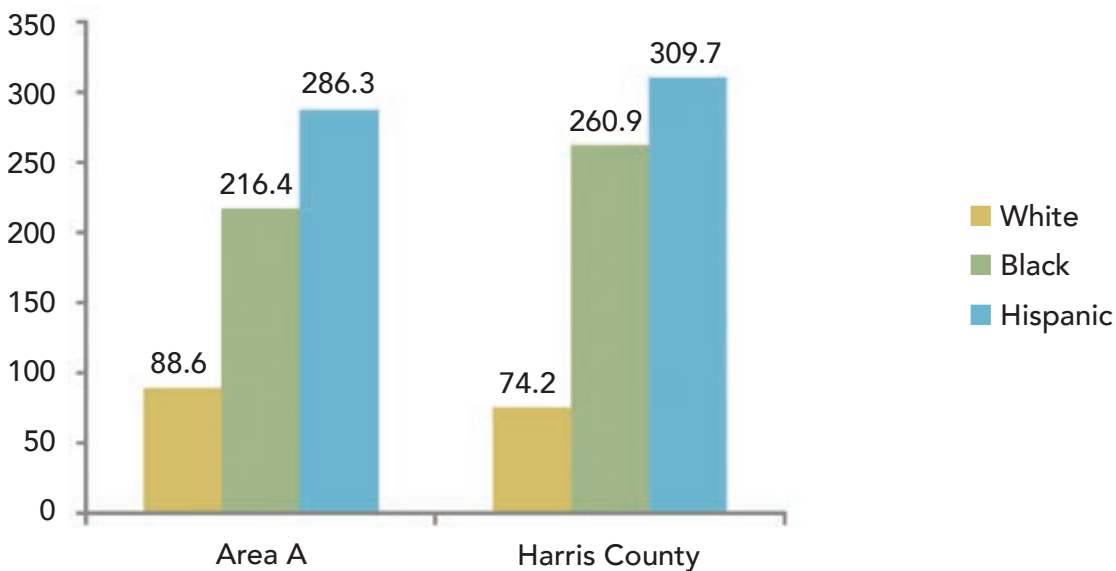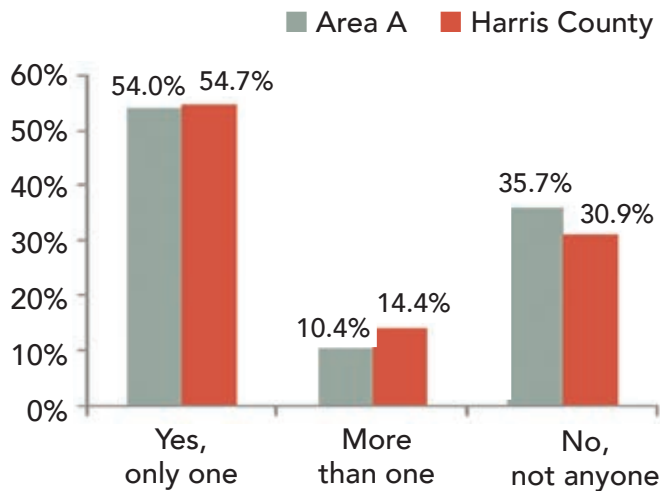
Data Source: Office of Strategic Decision Support, Health and Human Services Commission, SFY 2012
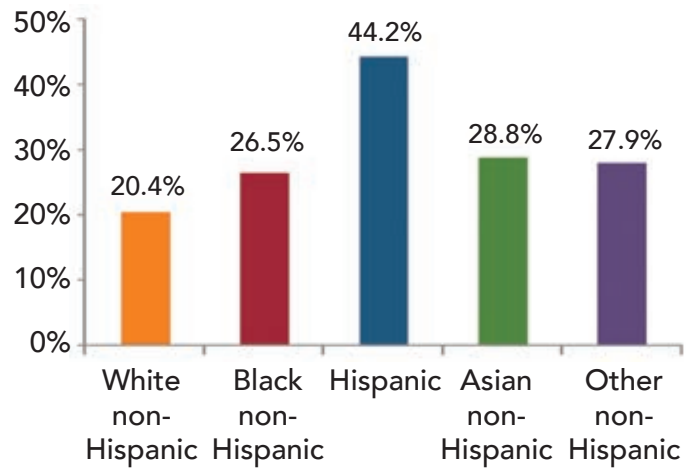
Access to Care

Factors such as having a regular medical care and health insurance coverage affect the likelihood of accessing preventive care (CDC, 1998). According to Healthy People 2020 (2013a), these factors contribute to having better health outcomes, fewer disparities and lower associated healthcare cost.

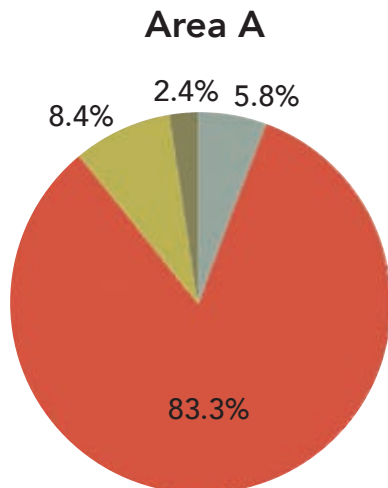## Personal Doctor or Health Care Provider

Legend: ■ Area A   ■ Harris County

- Yes, only one: 54.0% (Area A), 54.7% (Harris County)
- More than one: 10.4% (Area A), 14.4% (Harris County)
- No, not anyone: 35.7% (Area A), 30.9% (Harris County)

No Personal Doctor by Race/Ethnicity for Harris County

- White non-Hispanic: 20.4%
- Black non-Hispanic: 26.5%
- Hispanic: 44.2%
- Asian non-Hispanic: 28.8%
- Other non-Hispanic: 27.9%

More than a third (35.7%) of residents in Area A were not currently receiving care by a personal doctor or a health care provider as compared with 30.9% in Harris County. In Harris County, higher proportions of Hispanics reported lack of personal doctor as compared with other racial/ethnic groups. For those that did access a health care provider, more than 80.0 percent spent thirty minutes or less traveling to a provider location.

Travel Time to Place of Medical Care

Area A
- Never go to the doctor: 5.8%
- Less than 30 minutes: 83.3%
- 31 minutes to 60 minutes: 8.4%
- More than 60 minutes: 2.4%

Harris County
- Never go to the doctor: 3.7%
- Less than 30 minutes: 81.0%
- 31 minutes to 60 minutes: 13.3%
- More than 60 minutes: 1.9%

Legend:
- ■ Never go to the doctor
- ■ Less than 30 minutes
- ■ 31 minutes to 60 minutes
- ■ More than 60 minutes
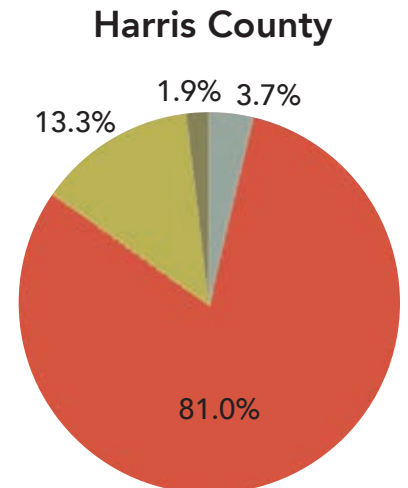
Data Source: HHS, 2010

Summary and Recommendations

Summary

- A majority of the 517,512 residents in Area A are relatively young, about half are under the age of 30. Nearly half of the population in Area A are of Hispanic or Latino descent.

- The average household income is approximately $62,000 and 30.9 percent of residents hold management, business, science and art positions. However, aggregating higher income areas with many impoverished areas results in an inflated mean household income, which may mask patterns of material deprivation within some Area A neighborhoods.

- Forty percent of residents are either unemployed or not considered part of the work force, and 16.9 percent earned less than $15,000 annually.

- More than a fourth of the residents in Area A have not graduated high school (27.7%). Among those living below the poverty line, about half have not completed high school (48.0%).

- Poverty distribution shows that the rate of poverty is highest amongst Blacks, followed by Hispanics.

- Less than half of the residents have private health insurance coverage (43.3%), approximately 22 percent are on Medicare or some other public insurance option, and over one-third are uninsured.

Recommendations

At the Individual Level:

- Education, skill building and job training are some of the primary areas that need to be emphasized.

- Families with children need to reiterate the importance of education and provide long term engagement and support for their children's schooling.

- Any intervention developed should be culturally relevant to meet the diverse needs in Area A.

At the Organizational Level:

- Culturally relevant and evidence-based programs aimed at poverty reduction, enhancement of income and increasing education levels are needed in neighborhoods where at least 20 percent of residents live below the FPL.

- Active engagement of local political representatives and community leaders to work towards improving socio-economic conditions should be sought.

- Vigorous efforts to disseminate accurate information about the Affordable Care Act (ACA) in the community by local stakeholders should be promoted. Assistance in ACA enrollment for obtaining medical coverage for uninsured residents by local organizations should be provided.

At the Policy Level:

- Engagement, continual discussion, identification of sustainable solutions and implementation of evidence- based strategies to reduce inequality and improve quality of life among residents of Area A need to be conducted.

- Advocate to protect resources for low income individuals and impoverished areas.

Health Conditions and Quality of Life

- ◆ Cardiovascular Diseases

- ◆ High Blood Pressure

- ◆ Overweight and Obesity

- ◆ Diabetes

- ◆ Sexually Transmitted Diseases

- ◆ Communicable Diseases

- ◆ Mental Health

- ◆ Quality of Life

Cardiovascular Diseases

Cardiovascular diseases, also called heart diseases include heart attack, stroke, heart failure and coronary heart disease. Coronary heart disease (CHD) is a result of coronary artery disease (CAD). In the U.S., CAD is the most common type of heart disease and the leading cause of death (CDC, 2013a). CHD occurs when plaque builds up in the coronary arteries, which supply oxygen-rich blood to the heart. A blockage in these arteries can lead to a heart attack (American Heart Association, 2013).

Stroke is the fourth leading cause of death in the U.S. and occurs when a blood clot or hemorrhage interrupts the blood supply to the brain (National Stroke Association, 2013).
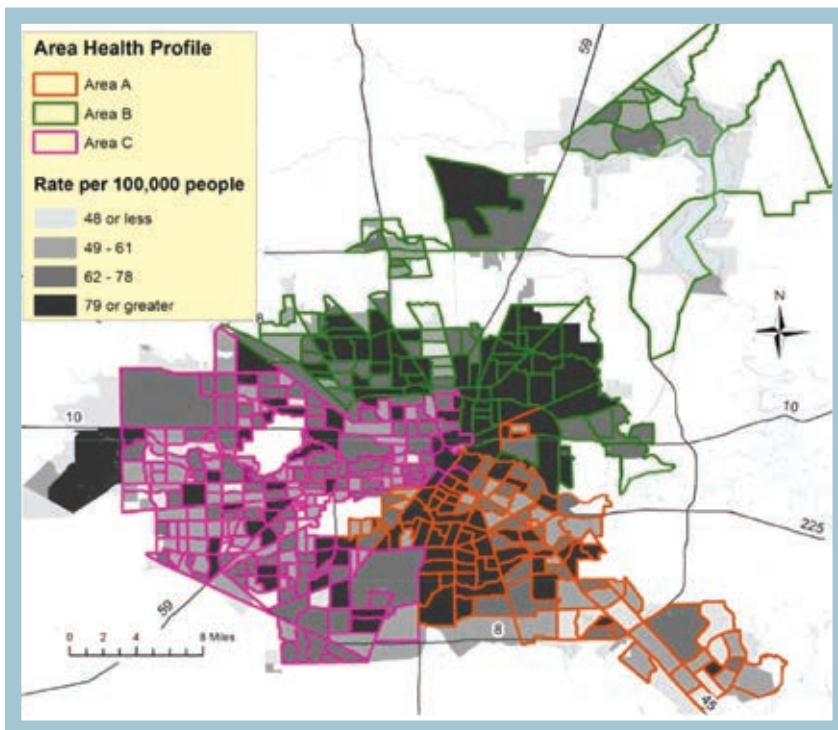
Has a doctor, nurse or other health professional EVER told you that you had coronary heart disease, stroke, heart attack?

Area A — City of Houston — Harris County
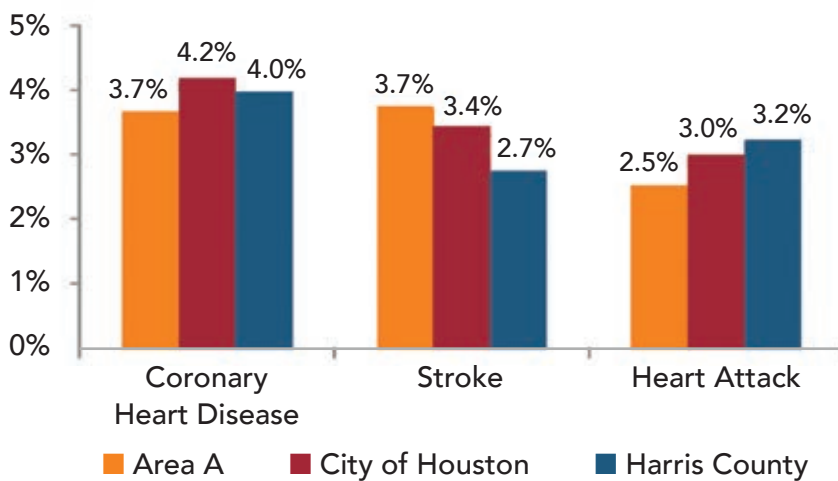
According to CDC, coronary heart disease kills more than 385,000 people annually. Every year about 715,000 Americans have a heart attack, and stroke kills 130,000 Americans annually. (CDC, 2014a)

Slightly lower proportions of residents in Area A reported having coronary heart disease (3.7%) and heart attack (2.5%) than residents in the City of Houston and the residents in Harris County. However, the proportion of residents in Area A that had a stroke (3.7%) was slightly higher than in Houston and Harris County.

The figure on the left shows out-of-hospital cardiac arrest rate for census tracts in Houston area. The study indicated that individuals at highest risk of out-of-hospital cardiac arrest were found to be African Americans, who were of low income or education level and were older. (Raun et al, 2013)

The cardiovascular disease data presented above may have been underestimated with wider confidence intervals as compared to other national statistics such as BRFSS.

Empirical Adjusted Out-of-Hospital Cardiac Arrest per 100,000 population for 2004 (Raun et al, 2013)

Data Source: HHS, 2010

High Blood Pressure

High blood pressure (HBP) occurs when the force of the blood against artery walls is high (CDC, 2012e). High cholesterol results from fat deposits in blood vessels that reduce blood flow in the arteries. "Approximately 1 out of every 6 American adults has high blood cholesterol (CDC, 2012c)." HBP is considered the "silent killer" because just as with high cholesterol, there are often no warning signs or symptoms (CDC, 2012e).

An estimated 68 million adults in the U.S. have high blood pressure. A normal blood pressure level for adults is 120/80 mmHg (CDC, 2013b).

Have you ever been told by a doctor, nurse or other health professional that you had high blood pressure?

Area A 30.0%, City of Houston 30.8%, Nationwide 30.4%, Harris County 30.1%
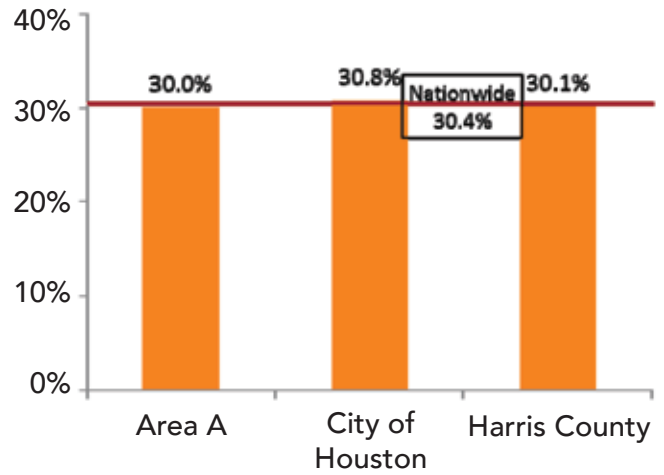
The proportion of residents in Area A reporting having HBP was comparable to the city, county, and nationwide statistics. According to CDC, about one-third of adults in the U.S. have high blood pressure and only about half (46.5%) of people with high blood pressure have their condition under control. (CDC, 2014b)

Taking Medication for High Blood Pressure
Yes ■ No ■ Do not know/ Refused

Area A 0.9%, 24.7%, 74.3%
City of Houston 0.9%, 28.2%, 70.9%
Harris County 0.9%, 26.0%, 73.1%
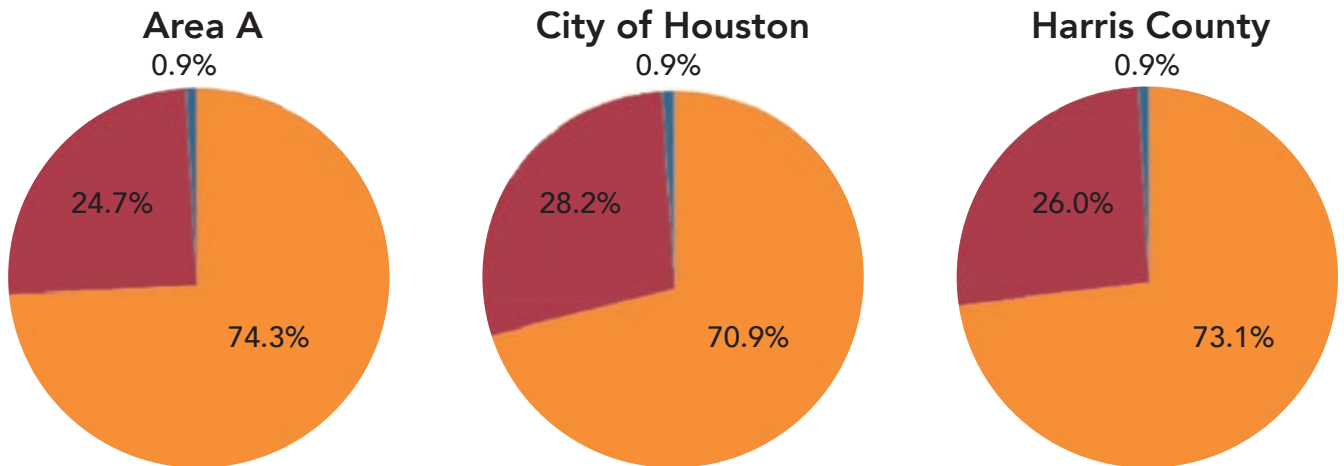
High blood pressure typically develops over many years, and it affects nearly everyone eventually. Fortunately, high blood pressure can be detected and controlled (Mayo Clinic, 2014). The proportion of residents with diagnosed high blood pressure in Area A that reported taking medication (74.3%) was comparable with Harris County (73.1%), but slightly higher than that of the City of Houston (70.9%). However, the proportion of those who reported not taking medication may be taking other measures to control their high blood pressure.

Hispanic populations have low control rates for high blood pressure, a major risk factor for heart disease and stroke. Also, they have high prevalence of high blood cholesterol, and their diets often are high in salt and saturated fats (CDC, 2014c).

Data Source: HHS, 2010

Overweight and Obesity

Overweight and obesity are terms used to define ranges of weight that are greater than what is considered healthy for a given person's height (CDC, 2012f). Based on this information, a person's body mass index (BMI) typically provides a reliable indication of body fatness (CDC, 2012f).

> For adults, BMI ranging between 25.0 and 29.9 is considered overweight. A BMI greater than or equal to 30.0 is considered obese. (CDC, 2012f).

BMI Categories for Area A (By Age Group)
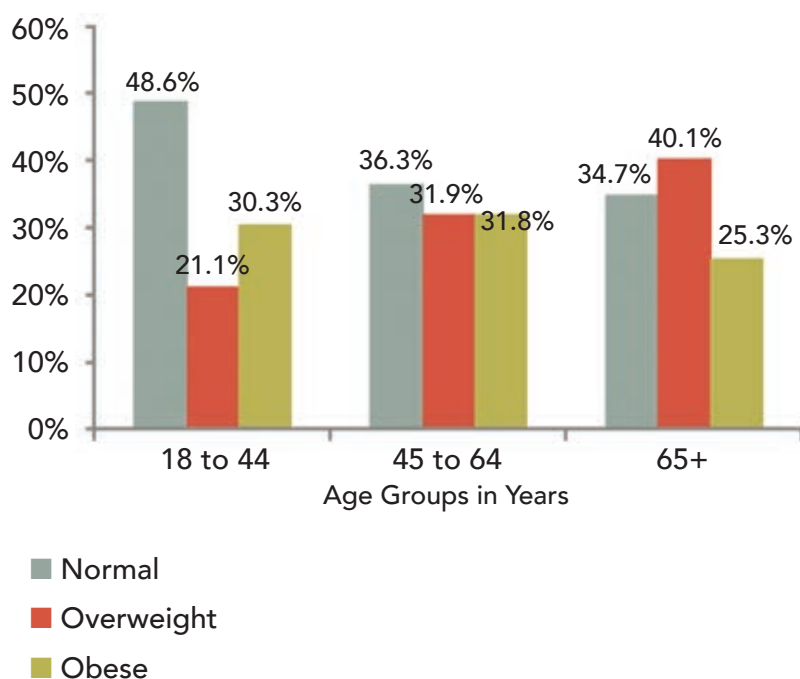
Obesity among American adults is highly prevalent and steadily rising. It increases an individual's risk for health conditions such as diabetes, heart disease, stroke, high blood pressure, certain cancers, depression and a host of other conditions. It is also associated with increased medical cost to the health care system. From 2009-2010, more than two-thirds of U.S. men and women (68.8%) were considered overweight or obese (National Institute of Diabetes and Digestive and Kidney Diseases, 2013), which is slightly higher than Harris County (66.3%).

In Area A, 30.3 percent of those 18 to 44 years old were considered obese compared to 28.0 percent in the City of Houston. A higher proportion of those 65 and older were considered obese in Area A (25.3%) than those 65 years and older in the City of Houston (22.5%).

## BMI Categories for City of Houston (By Age Group)
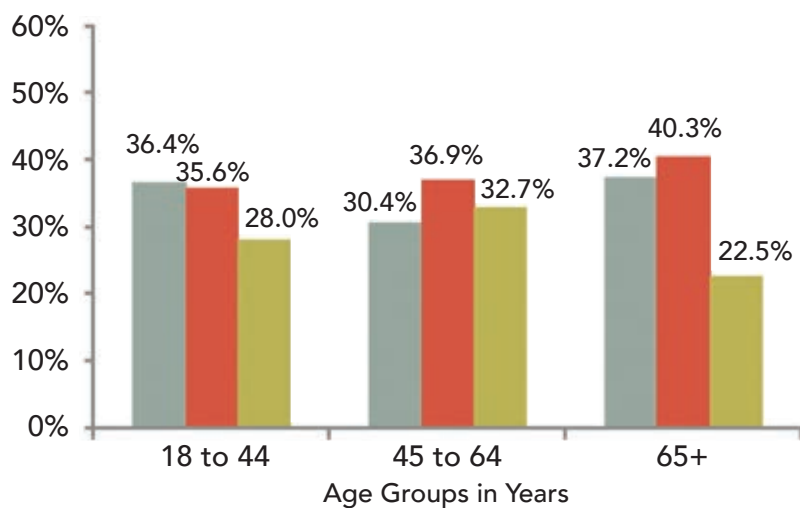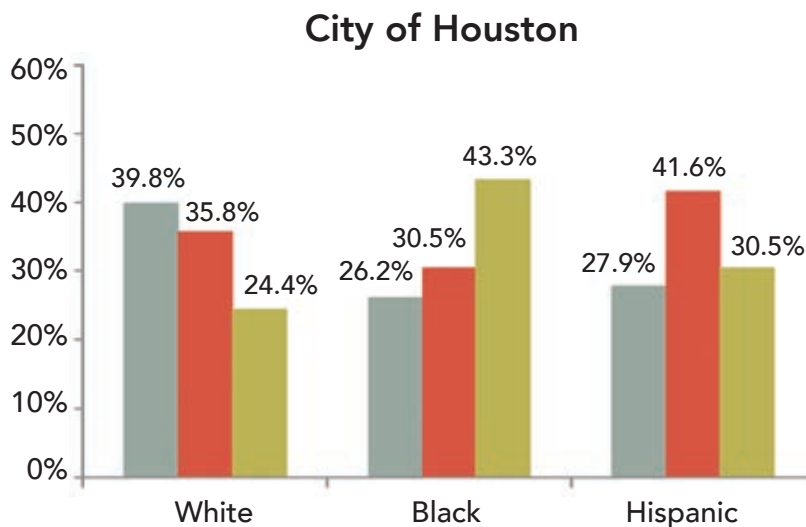

Data Source: BRFSS, 2008-2010

Overweight and Obesity

The American Medical Association (2013) declared obesity a disease in June, 2013. Although controversial, this has far reaching implications.

◆ Defining obesity as a disease will help highlight the epidemic in the U.S. and spur health insurers to take greater responsibility for treating obesity.

◆ It means that the stigma associated with obesity would likely be reduced. It implies that obesity is not simply a result of eating too much and exercising too little. There are factors that are out of a person's control that can perpetuate obesity in certain populations.

◆ However, it shifts the focus away from prevention and drives obesity to a narrower medical model.

Overweight and Obesity by Race / Ethnicity
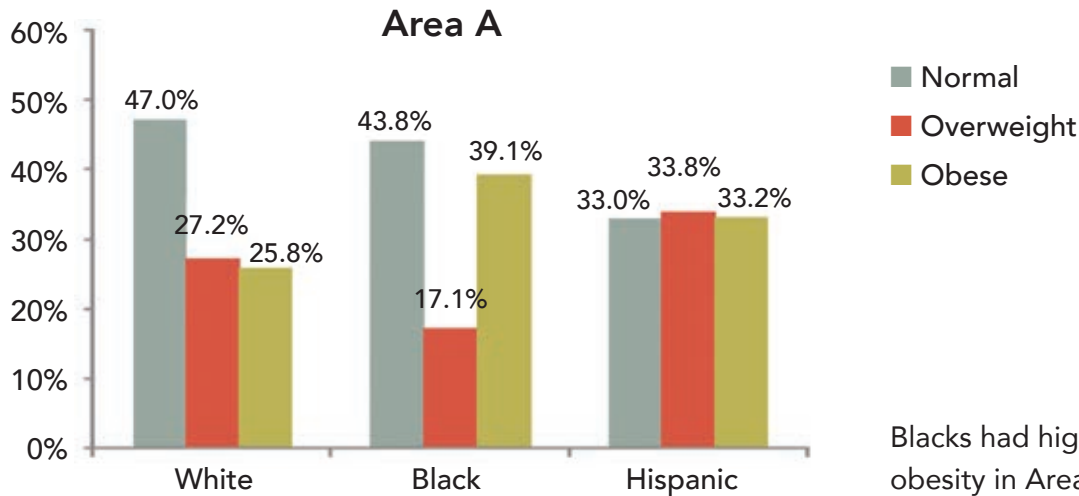
Area A

Blacks had higher proportions of obesity in Area A as compared with Hispanics and Whites. However, higher proportion of Hispanics were overweight in Area A as compared to other race/ethnicities. In both Area A and the City of Houston, higher proportions of Whites were of normal weight during 2008 to 2010.

City of Houston

Data Source: BRFSS, 2008-2010

Diabetes

Diabetes can occur when blood glucose levels are above normal. High blood glucose levels can lead to serious health problems, such as cardiovascular disease and kidney failure (CDC, 2012a). Diabetes is the seventh leading cause of death in the U.S. (CDC, 2012d). Diabetic adults are two to four times more likely to die of heart disease or experience a stroke than non-diabetics. About 70 percent of people with diabetes have high blood pressure, which is a risk factor for cardiovascular disease (CDC, 2012a).

Diabetes Diagnosis by Health Professional (By Race/Ethnicity)
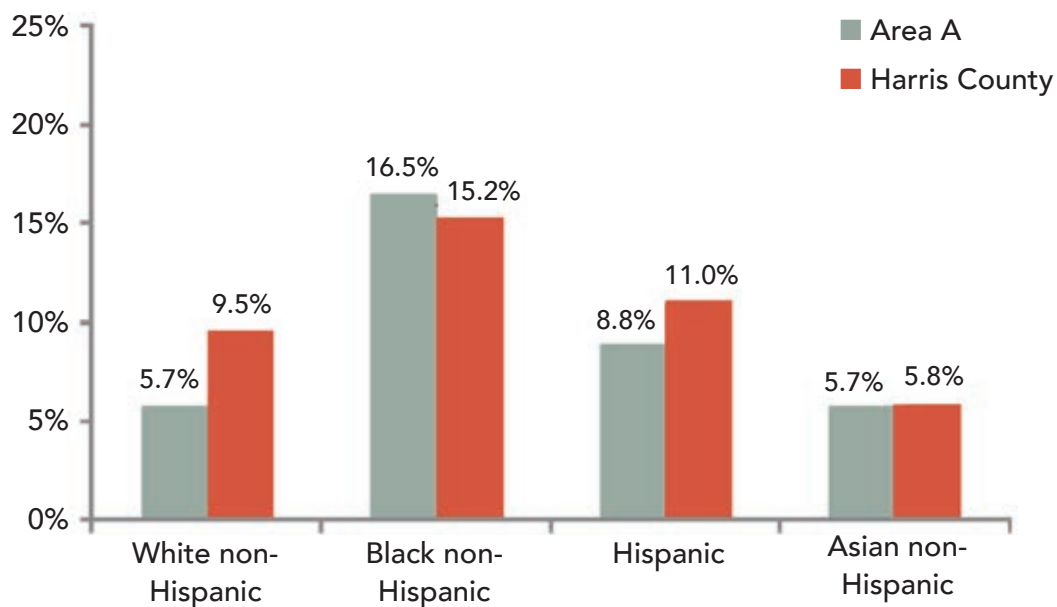
Higher proportions of Black non-Hispanics in Area A were told by a healthcare professional that they had diabetes compared to Harris County average for those racial and ethnic groups.

Type I Diabetes usually occurs in childhood or young adults. It develops when a person is insulin deficient and the body no longer produces insulin (National Diabetes Information Clearinghouse, 2012).

Type II Diabetes develops when a person is insulin resistant, and does not make enough insulin to keep the body's blood glucose levels normal. Type II Diabetes is the most common type of diabetes and can occur at any age (National Diabetes Information Clearinghouse, 2012).

Pre-diabetics should also take preventive measures to avoid developing diabetes, as their blood sugar levels are above normal, but below the classification for diabetes (National Diabetes Information Clearinghouse, 2012).

Data Source: HHS, 2010

Sexually Transmitted Diseases

Chlamydia, gonorrhea, and syphilis are sexually transmitted diseases (STDs) that affect both men and women of all age groups. Chlamydia is the most commonly reported STD in the U.S. and women are more prone to infection than men. When chlamydia is untreated it can lead to serious health problems, including infertility (CDC, 2013d). Gonorrhea can also impact a woman's ability to have children and has the possibility of spreading to the eyes of newborns during birth from their infected mother (Mayo Clinic, 2013a). Syphilis can spread by sexual contact from person to person via skin or mucous membrane contact (Mayo Clinic, 2013b). Rates of syphilis in the U.S. have been rising since 2000, particularly among men who have sex with men (MSM) (CDC, 2013e).

Timely diagnosis and treatment of STDs is recommended to help prevent negative long-term consequences such as the transmission of HIV. Individuals with STDs are at least two to three times more likely to acquire HIV through sexual contact than those uninfected (CDC, 2010).

Sexually Transmitted Diseases (Rate per 100,000 Population)
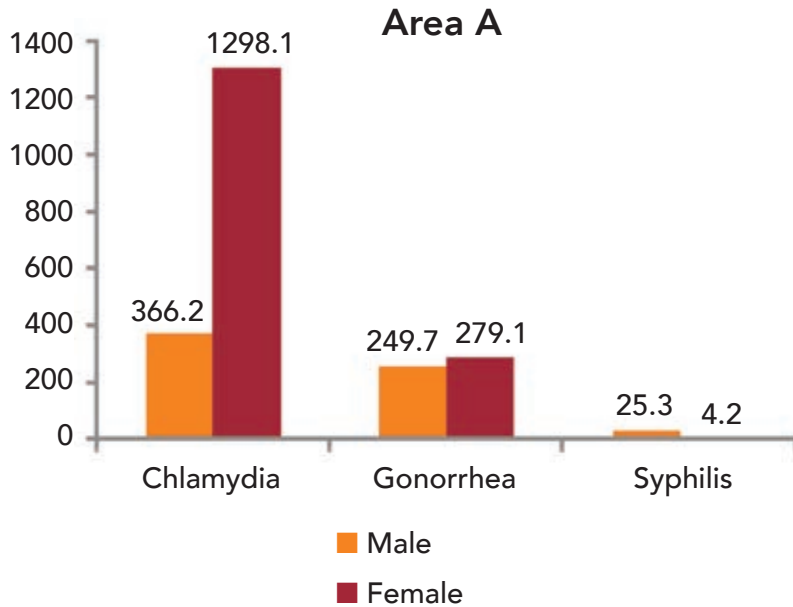
Area A

Similar to Houston/Harris County, chlamydia is the most commonly reported STD among women in Area A. In 2012, the rate of chlamydia for females in Area A was 1,298.1 per 100,000 population compared to 824.1 per 100,000 population in Houston/Harris County.
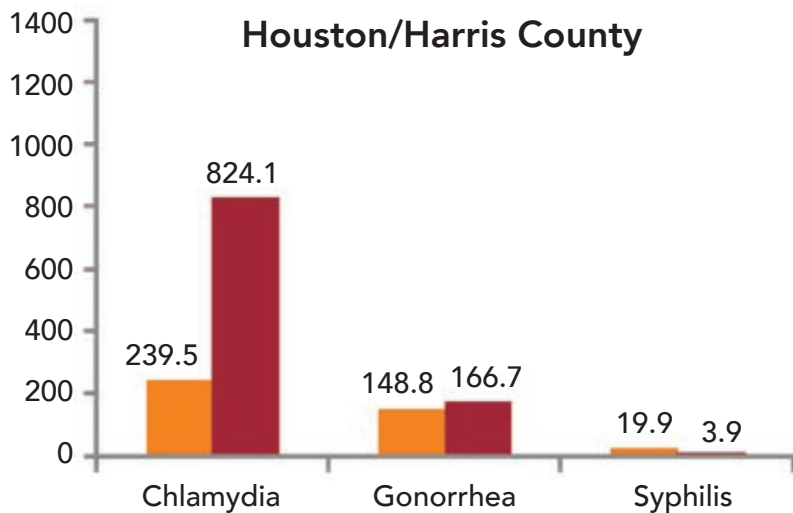
For both males and females, rates of chlamydia, gonorrhea and syphilis are higher in Area A as compared to Houston/ Harris County. Research shows that 63 percent of the reported cases of syphilis are among men who have sex with men (MSM) as per CDC (2013e). In Area A, for every female that has syphilis there are about six males with syphilis, and in Houston/Harris County the ratio is about 1:5.

Houston/Harris County

Data Source: Bureau of HIV/STD Prevention, HDHHS, 2012

HIV/AIDS

Human Immunodeficiency Virus (HIV) is a lifelong illness that can be transmitted sexually, through contact with infected blood, or from mother to child during pregnancy, childbirth or breast-feeding (Mayo Clinic, 2012).

The virus gradually destroys specific immune system cells, and over time the body becomes unable to fight off infections and diseases (Mayo Clinic, 2012). When this occurs, the HIV infection transitions to acquired immunodeficiency syndrome (AIDS).

Treatment

Antiretroviral therapy (ART) is used to slow the progression of the disease and helps lower the chance of spreading the infection to others. Today, HIV is considered a chronic condition and a nearly normal life expectancy can be expected for those diagnosed with HIV and treated before the disease is far advanced (CDC, 2013g).

## HIV Infection (Rate per 100,000 Population)
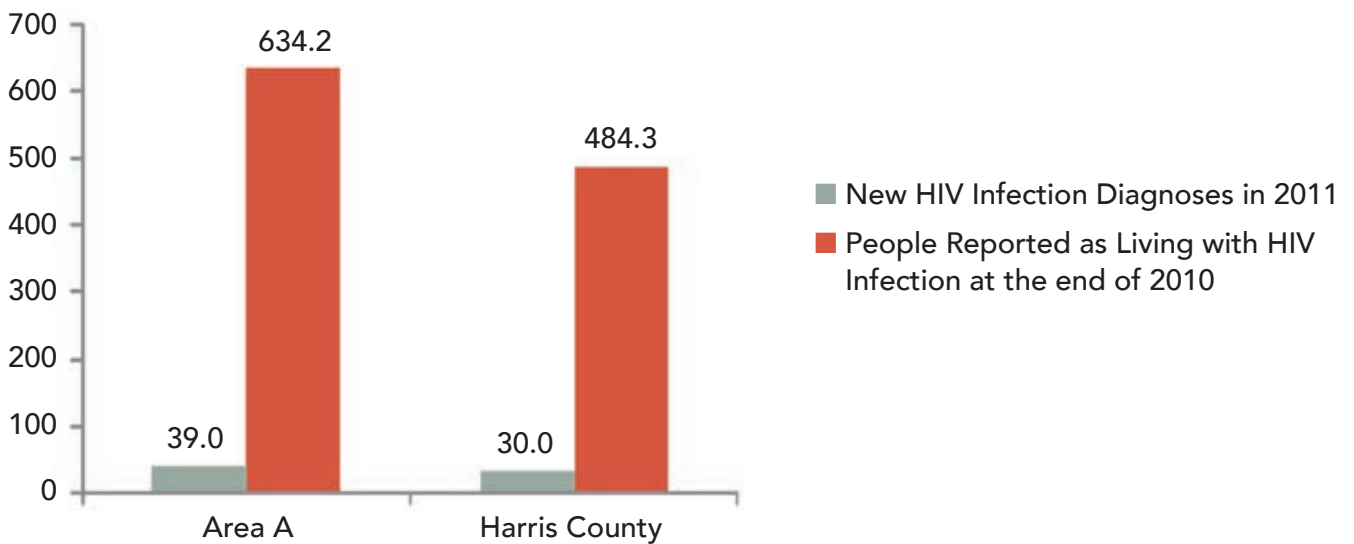
In 2010, the rate of people living with HIV was higher in Area A than in Harris County (634.2 per 100,000 population vs. 484.3 per 100,000 population). During 2011, the rate of newly diagnosed cases of HIV infection was 39.0 per 100,000 population in Area A and 30.0 per 100,000 population in Harris County.

Data Source: Bureau of Epidemiology/HDHHS, 2010-2011

Communicable Diseases

Five Year Average Rate of Communicable Diseases (per 100,000 population)
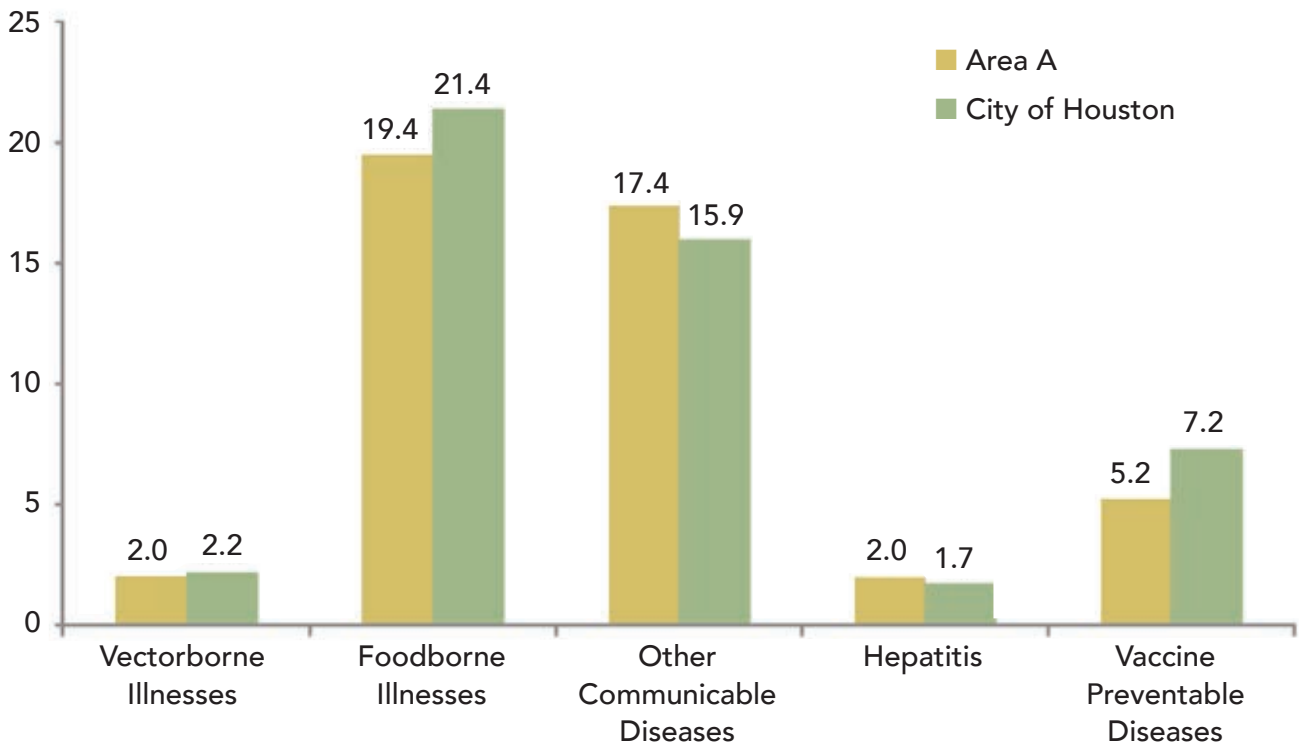
Note: Disease rates include all Texas notifiable conditions reported between 2008-2012, with the exception of HIV, STDs, and Tuberculosis (TB).

Communicable diseases, also known as infectious or transmissible diseases, can spread from person-to-person, animal to person, or through vectors such as contaminated water, food, insects, or infected objects (Wisconsin Department of Health Services, 2013).

Diseases such as measles, mumps, rubella, pertussis, influenza, and certain forms of hepatitis can be prevented through immunization. Most food borne illnesses can be prevented through proper food handling and cooking.

Area A had communicable disease rates similar to those found in the City of Houston for vectorborne illnesses (an illness caused by an infectious microbe that is transmitted to people by bloodsucking insects) and Hepatitis. In both Area A and Houston as a whole, foodborne illnesses were the most commonly reported communicable diseases, of those presented here. The rate for all other communicable diseases combined was higher in Area A (17.4 per 100,000 population) than the City of Houston (15.9 per 100,000 population). The rates in Area A were lower for vaccine preventable diseases, during 2008 to 2012.

Data Source: Bureau of Epidemiology/HDHHS, 2008-2012

Mental Health

Mental health is a state of well-being and is an essential component of health (World Health Organization (WHO, 2013)). Several social, psychological, and biological factors determine mental health status (WHO, 2013). Social determinants that support good mental health include adequate housing, safe neighborhoods, equitable jobs and wages, quality education, and equity in access to quality health care (CDC, 2011b).

A consistent association is found between mental health and physical health. Mental illness can affect the occurrence, treatment, and course of many chronic diseases including obesity, asthma, diabetes, cancer and cardiovascular disease (CDC, 2011b).

An estimated 13 million American adults (1 in 17) have a seriously debilitating mental illness (Healthy People 2020, 2013b), and only about 17 percent are considered to be in a state of optimal mental health (CDC, 2011b).

Psychological Distress and Taking Medication for Mental Health Problems (By Gender)

Severe Psychological Distress

Medication for Mental Health Conditions
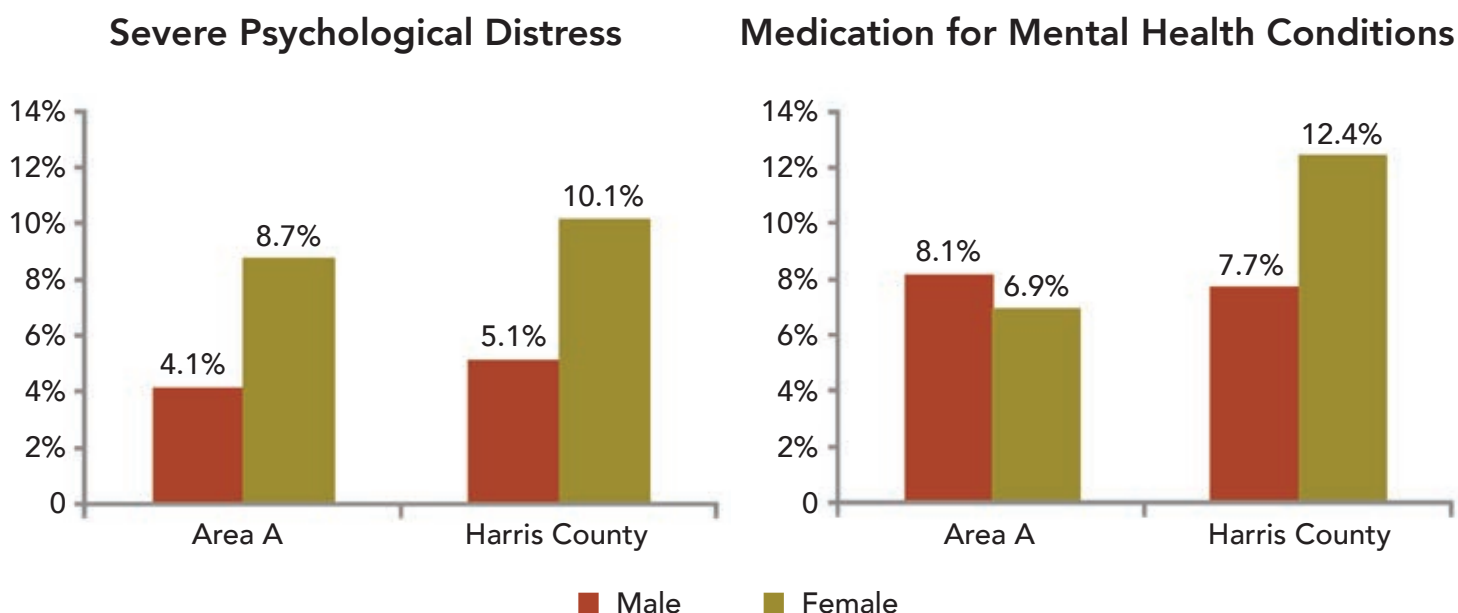
A higher proportion of both males (5.1%) and females (10.1%) in Harris County experienced severe psychological distress during the past 12 months than residents in Area A (4.1% and 8.7% respectively). Female residents in Area A reported they had severe psychological distress twice as often as male residents in Area A. A higher proportion of males (8.1%) in Area A reported taking prescription medication, such as antidepressants or sedatives, for an emotional or personal problem than did females.

When asked "do you feel you might need to see a healthcare professional for problems with mental health, emotions, nerves, or use of alcohol or drugs in the past 12 months", approximately 13 percent of males and 14 percent of females in Area A responded yes, compared to males (13.4%) and females (19.5%) in Harris County. However, in both Area A and Harris County, fewer residents reported having visited a healthcare professional for these types of problems.

Data Source: HHS, 2010

Quality of Life

General Satisfaction with Life
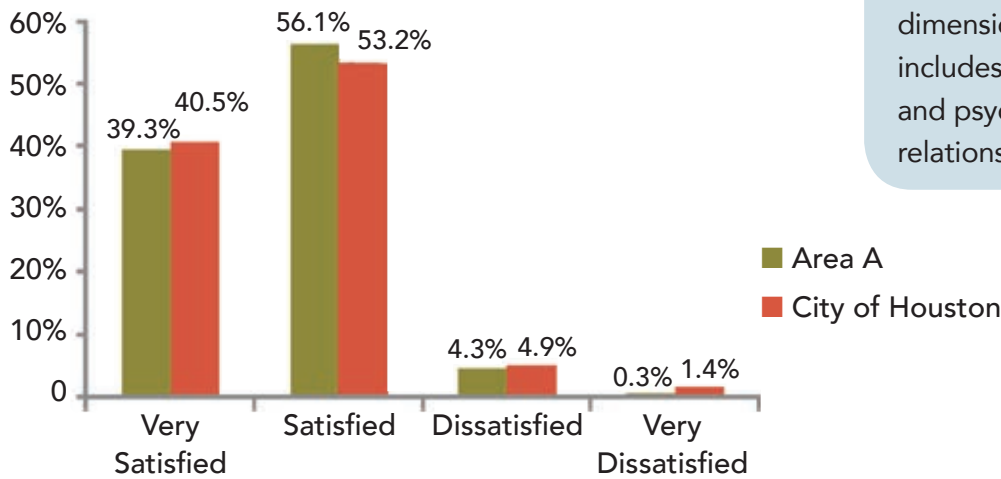
Quality of Life (QOL) is a multi-dimensional concept that includes domains of physical and psychological health, social relationships, and environment.
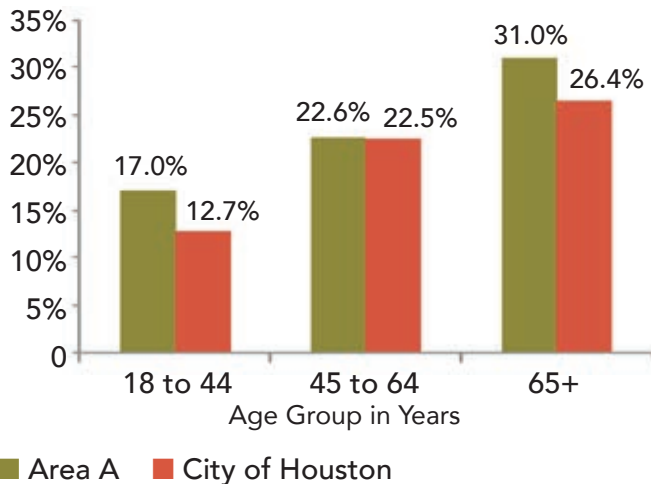
■ Area A
■ City of Houston

Similar to the City of Houston, the majority of residents in Area A (95.4%) reported being either satisfied or very satisfied with life.

General Health Status "Fair to Poor" (By Age Group)

Age Group in Years

■ Area A   ■ City of Houston

In the City of Houston and Area A, the highest percentage of residents reporting fair to poor general health from 2008 to 2010 was 65 years and older. A higher proportion of these residents lived in Area A (31.0%) than the City of Houston (26.4%).

A higher proportion of residents between 18 to 44 years old (17.0%) also reported fair to poor general health compared to those of 18 to 44 years old in the City of Houston (12.7%).

Lack of Social and Emotional Support

■ Area A   ■ City of Houston
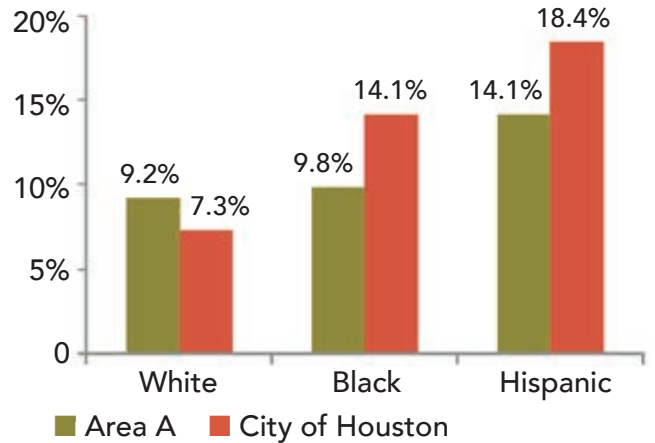
Among those who reported rarely or never receiving social and emotional support, Hispanic residents in Area A reported they received the least support (14.1%) followed by Blacks (9.8%) and Whites (9.2%).

A higher proportion of White residents in Area A reported they rarely or never received social and emotional support (9.2%) compared to Whites in the City of Houston (7.3%).

Racial/ethnic differences in certain estimates of mental health and quality of life may not reflect the true picture. Many first generation immigrants understand these survey questions differently from native born Americans due to many reasons.

Data Source: BRFSS, 2008-2010

Summary

- In Area A, the prevalence of heart attack was higher compared to the City and County, and the prevalence of stroke was lower. Prevalence of coronary heart disease in Area A was comparable with the City and County.

- Diagnosis of high blood pressure in Area A was comparable with the City and County.

- Higher proportions of younger adults (18-44 year old) are of normal weight in Area A than those in the City of Houston.

- Reportable STDs, such as chlamydia, gonorrhea, and syphilis are higher in Area A than the rest of Houston/Harris County.

- In 2010, the rate of HIV infection was 634.2 per 100,000 and in 2011, the rate of newly diagnosed cases of HIV infections in Area A (incidence) was 39.0 per 100,000.

- A majority of residents reported being either satisfied or very satisfied with their lives.

- Of those who reported poorer mental health status, women appear to experience more episodes of severe psychological distress (approximately 9%) than men, but fewer women are taking medication for mental health problems (6.9%).

- Higher proportions of residents in Area A reported that their general health was fair to poor than in the City of Houston. Among residents 65 years and older, 31 percent reported this type of health status, and among residents 18 to 44 years old 17 percent reported that their general health status was fair to poor.

Recommendations

At the Individual level:

- Reduce modifiable risk factors to avoid developing chronic heart disease.

- Promote bystander cardiopulmonary resuscitation (CPR) to prevent cardiovascular arrests.

- Adhere to a regular annual physical exam to ensure wellness and good health.

- Take preventive measures to help prevent diabetes by maintaining a normal blood glucose level, eating healthily, remaining physically active, regularly monitoring blood pressure and cholesterol levels, and regularly screening for diabetes (CDC, 2012a).

- The risk of heart attacks and strokes can be lowered by making healthy lifestyle choices in diet and exercise, and by taking prescribed medication (Center for Disease Control and Prevention, 2013b).

- Providers and local organizations should realign health care services targeting identified health conditions as priority issues.

At Organizational level:

- Agencies may integrate services across mental health and physical health services to improve access and earlier intervention.

- Increase use of evidence-based chronic disease education in culturally diverse settings used by residents.

At the Policy Level:

Strategic approaches should be developed and implemented to address health conditions such as obesity, high blood pressure and diabetes by:

- Enhancing opportunities to access healthy food choices.

- Improving food item options to make the healthy choice the easier choice.

- Improving public safety and creating opportunities to be more active at schools, parks, community centers, work sites.

- Improving access to screenings and education.

- Increase availability of mental health services for low income residents.

- Promoting community design that provides opportunities for healthy eating and active living.

- Promoting "health in all policies", a collaborative approach that integrates and articulates health considerations into policy making across sectors, and at all levels, to improve the health of all communities and people.

Health Behaviors

- ◆ HIV Screening

- ◆ Cancer Screening

- ◆ Smoking

- ◆ Alcohol

- ◆ Fruits and Vegetables/ Physical Activity

HIV Screening

Health screenings are tests that look for diseases before there are symptoms, and can find diseases early when they are easier to treat (Medline Plus, 2013a). Increasing HIV screening can help foster earlier detection of HIV infection, identify and counsel persons with unrecognized HIV infection, link them to clinical and prevention services, and further reduces perinatal transmission of HIV (CDC, 2006).
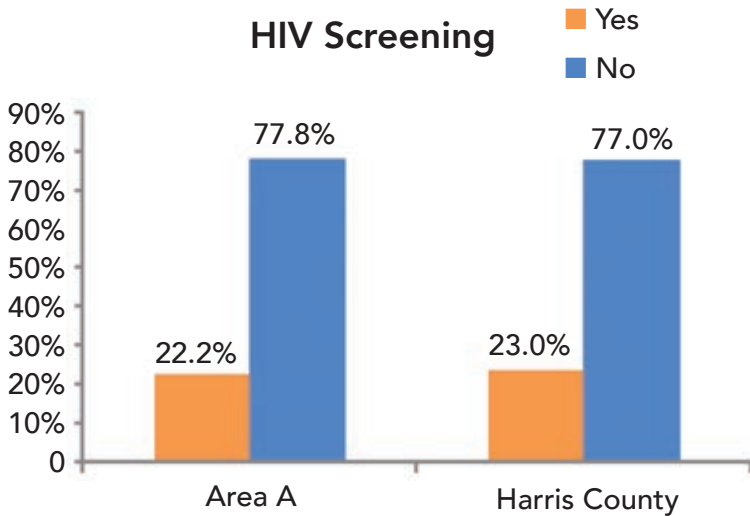
HIV Screening

Residents in Area A (22.2%) reported receiving a HIV screening slightly less often than those in Harris County (23%).

The most common reasons for not getting an HIV test in Area A were (1) Most felt they had not been exposed to HIV (46.2%), (2) Some felt testing was unnecessary (14.4%).

A total of 8.5% of residents in Area A reported lack of knowledge, access, or associated cost as barriers to HIV testing, compared to a total of 5.6% residents reporting these reasons in Harris County.

During 2010, most adults in Area A and Harris County did not receive a HIV screening (77.8% vs. 77.0%). According to a recent CDC analysis, the proportion of adults who had ever been tested for HIV increased from 37 percent in 2000 to 45 percent in 2010. No Citation.

Reasons Never Tested for HIV
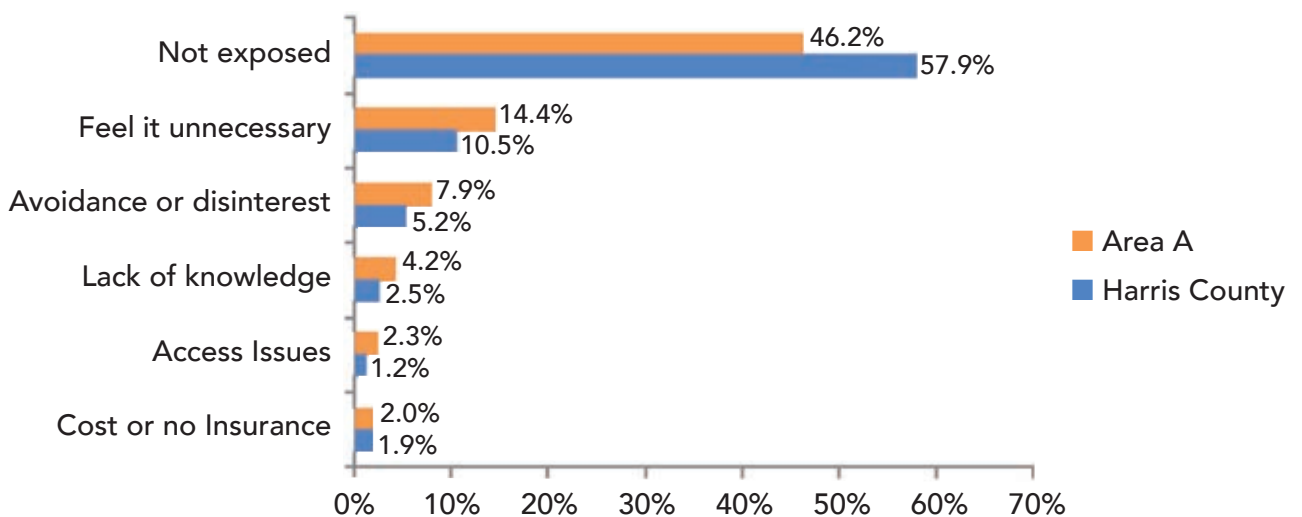
Data Source: HHS, 2010

Cancer Screening

Breast cancer

Breast cancer occurs when abnormal cell growth forms in the breast tissue that can invade surrounding tissues or spread to other areas of the body. Nationally, 211,731 women were diagnosed with breast cancer, and there were 40,676 related deaths from the disease in 2009 (CDC, 2013f). The age adjusted cancer mortality rate in Harris County from 2006-2010 due to breast cancer was in the range of 11.8-14.2 per 100,000 population (Texas Cancer Registry [TCR], 2013). White women are slightly more likely to develop breast cancer than African American, Hispanic, and Asian women. But African American women are more likely to develop more aggressive, more advanced-stage breast cancer that is diagnosed at a young age. African American women are also more likely to die from breast cancer. Some of these differences in outcomes may be due to less access to mammography and lower quality medical care, as well as various lifestyle patterns (eating habits and weight issues for example) that are more common in some ethnic groups than in others (Breast Cancer, 2014).
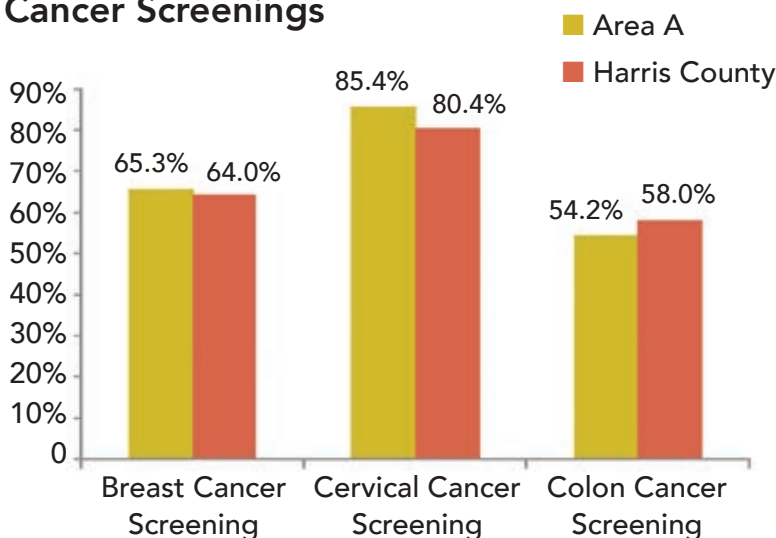
Colorectal Cancer

Colorectal cancer refers to colon cancer, cancer of the large intestine (colon), and rectal cancer which occurs at the end of the colon (Mayo Clinic, 2011b). It accounts for nine percent of all cancer incidences (new cases) (Haggar & Boushey, 2009), and is the third leading cause of cancer deaths among men and women (American Cancer Society, 2011). In 2009, there were 136,717 colorectal cancer diagnoses and 51,848 deaths in the U.S. (CDC, 2012i). In 2013, it was estimated that there were 102,480 new cases of colon cancer and 40,340 new cases of rectal cancer (American Cancer Society, 2012). The age adjusted cancer mortality rate in Harris County from 2006-2010 due to colorectal cancer was in the range of 11.2-13.7 per 100,000 population (TCR, 2013).

Cervical Cancer

All women are at risk for cervical cancer, which is a type of cancer that occurs in the cells of a woman's cervix. It is prevalent in women over age 30 and the most common cause of the disease is the human papillomavirus (HPV) (CDC, 2012h). Every year about 12,000 women in the United States get cervical cancer (CDC, 2012h). In 2013, there have already been 12,340 new cases of cervical cancer and 4,030 related deaths (National Cancer Institute, n.d.). The age adjusted cancer mortality rate in Harris County from 2006-2010 due to cervical cancer was in the range of 2.4-3.4 per 100,000 population (TCR, 2013).

Cancer Screenings

The proportions of reported cervical cancer screening among women 21 years and older and breast cancer screening among women 40 to 74 years were higher in Area A than Harris County. Reported screenings for colorectal cancer among those 50 years and older were lower among Area A residents than Harris County (54.2% and 58.0% respectively).
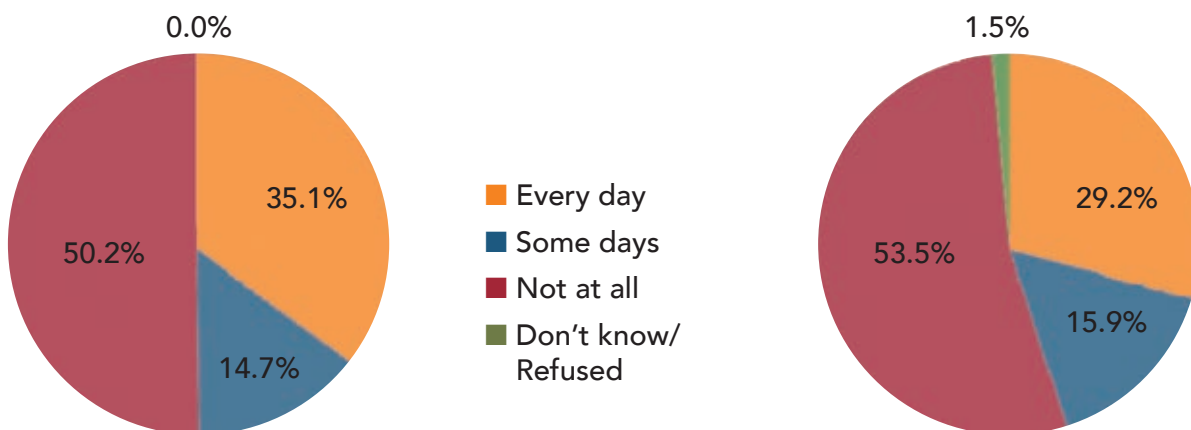
Data Source: HHS, 2010

Smoking

Individuals who smoke cigarettes and are exposed to tobacco smoke (second-hand) are at risk of premature death from chronic diseases such as lung cancer, ischemic heart disease and chronic obstructive pulmonary disease. National data show 90 percent of lung cancer cases result from cigarette smoking. Every year about 3,000 non-smokers die from lung cancer due to secondhand smoke in the United States. Smoking avoidance and cessation programs are two important measures to reduce the risk of developing lung cancer (CDC, 2013c).

Altogether, have you smoked at least 100 or more cigarettes in your entire lifetime?

Area A

Harris County

Area A: 38.4% Yes, 61.6% No

Harris County: 37.2% Yes, 62.8% No

Legend: ■ Yes ■ No
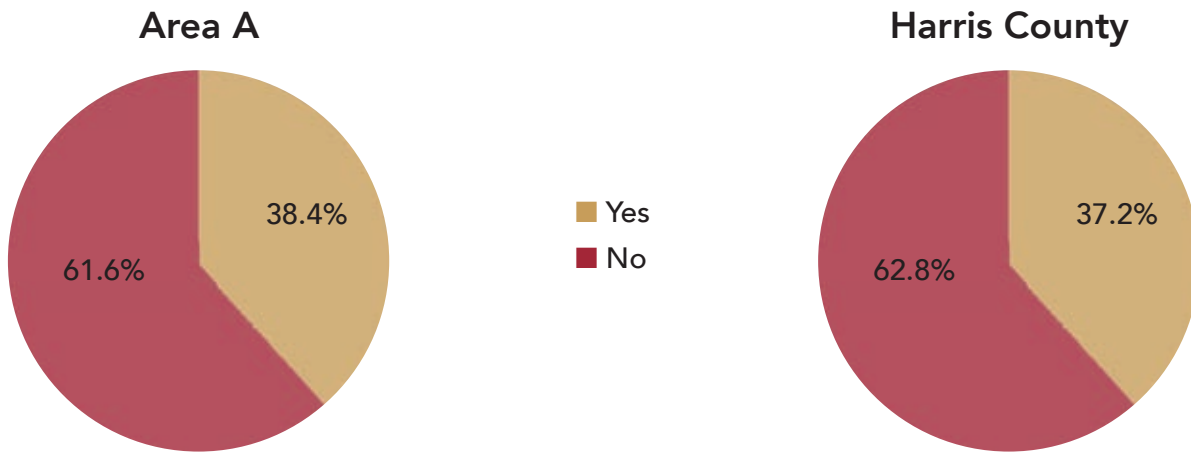
In Area A, slightly more adults (18 years and older) (38.4%) reported that they smoked at least 100 or more cigarettes in their entire lifetime than those in Harris County (37.2%). When asked how often they smoked, 35.1 percent of Area A smokers reported that they smoked every day, and 14.7 percent reported that they smoked some days compared to 29.2 percent and 15.9 percent respectively in Harris County.

Do you now smoke cigarettes every day, some days, or not at all?

Area A: 0.0% Don't know/Refused, 35.1% Every day, 14.7% Some days, 50.2% Not at all

Harris County: 1.5% Don't know/Refused, 29.2% Every day, 15.9% Some days, 53.5% Not at all

Legend: ■ Every day ■ Some days ■ Not at all ■ Don't know/Refused

Data Source: HHS, 2010

Alcohol Consumption

Excessive alcohol use can increase the risk of health problems such as injuries, violence, liver diseases, and cancer. Binge drinking is a common form of excessive alcohol use in the U.S., and refers to consuming five or more alcoholic beverages for men and four or more for women within about two hours (CDC, 2012b). According to the 2010 Dietary Guidelines for Americans, a moderate level of alcohol consumption per day is one drink for women and two drinks for men (Mayo Clinic, 2011a).

Average Number of Alcoholic Drinks During Past 30 Days, (on the occasions when they drank)
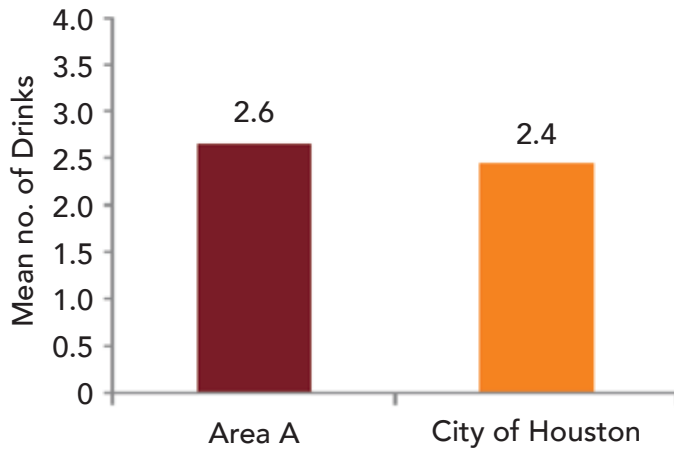
Largest Number of Drinks on Any Occasion
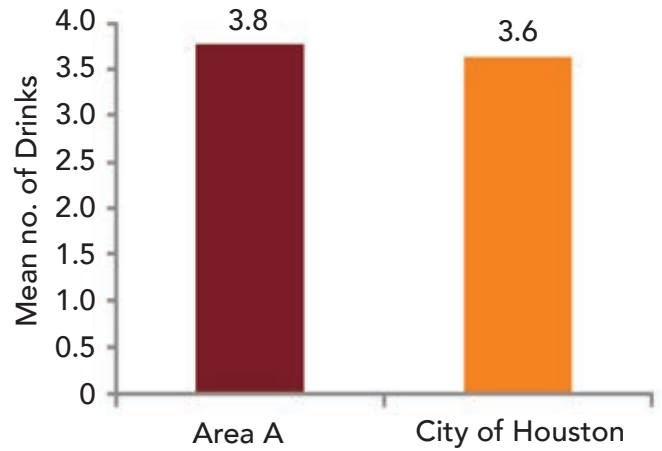
Residents in Area A consumed a larger number of alcoholic drinks during the past 30 days when they drank, and a larger number of alcoholic drinks on any given occasion than those in the City of Houston.

There may be a tendency to respond to questions on alcohol consumption and other sensitive areas in a socially desirable manner. This may result in possible underreporting and thus, underestimation of these estimates.

Examples of one drink include (Mayo Clinic, 2011a):

Alcoholic Beverage	Equivalency (fluid ounces)
Can of Beer	12
Glass of Wine	5
Shot of Distilled Spirits or Liquor	1.5

Data Source: BRFSS, 2008-2010

# Fruit/Vegetable Consumption and Physical Activity

Diets rich in fruits and vegetables provide essential vitamins and minerals, may reduce the risk of cancer and help protect against other chronic diseases (CDC, 2012g). Two cups of fruits and 2½ cups of vegetables per day are recommended for a 2,000 calorie intake (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2005).

Regular physical activity can improve overall health and fitness, and can reduce the risk of many chronic diseases (CDC, 2011c). It is recommended that adults engage in 150 minutes of moderate-intensity or 75 minutes of vigorous aerobic physical activity every week (CDC, 2011c).

Servings of Fruits and Vegetables

- Less than 5 servings per day or never
- 5 or more servings per day
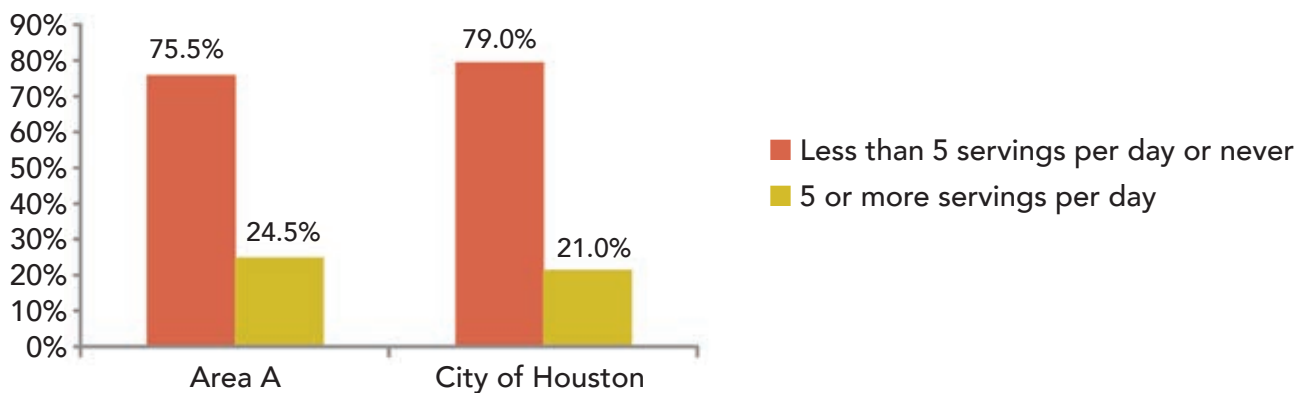
Area A and the City of Houston have similar patterns of daily fruit and vegetable intake and levels of physical activity. Most adults consume less than five servings of fruits and vegetables a day and do not meet the recommended level of moderate or vigorous physical activity. Only 21 percent of adults in the City of Houston are meeting nutritional guidelines for fruits and vegetable intake compared to 24.5 percent of adults in Area A. Less than half of Area A residents (41.2%) are meeting recommended levels of physical activity compared to 43.5 percent in the City of Houston.

Recommendations for Moderate or Vigorous Physical Activity for Area A

- Meets recommendation
- Some physical activity but does not meet recommendation
- No physical activity

Data Source: BRFSS, 2008-2010

Summary

- HIV testing in Area A was low during 2010; only 22.2 percent of adults received a screening for HIV. The most common reason for not getting tested was that the residents felt they had not been exposed to HIV, followed by some who felt testing was otherwise unnecessary.

- More than 50 percent of residents (50 years and older) reported screening for colon cancer.

- Almost two-thirds of female residents reported adherence to screening guidelines for breast cancer, and about 85 percent of female residents reported screening for cervical cancer.

- Approximately 38 percent of residents smoked 100 cigarettes in their entire lifetime, and approximately 35 percent reported smoking cigarettes every day during 2010.

- On occasions when individuals had an alcoholic beverage, an average of about two and a half drinks were consumed. The largest number of drinks consumed on any single occasion was about four.

- Approximately one-fourth of residents met nutritional guidelines for fruits and vegetables consumption and less than half of population met recommended levels for physical activity.

Recommendations

At the Individual level:

- Increase uptake and adherence to recommended screening behaviors.

- With average risk, colon cancer screening can begin at age 50, and with an increased risk, screening should begin sooner (Mayo Clinic, 2011c).

- Women between the ages of 21 and 65 years old should have regular Pap smear tests to screen for cervical cancer (CDC, 2012j).

- Regular clinical breast exams for women 20 to 39 years of age and annual mammogram screenings for women age 40 and older are recommended (Susan G. Komen, 2012).

- It is recommended that adolescents and adults ages 15 to 65 years old, those who are at increased risk, and all pregnant women be tested for HIV infection (United States Preventive Service Task Force, 2013).

- Adopt more healthy behaviors such as staying physically active and eating healthily, and avoid unhealthy behaviors such as excessive alcohol use.

At Organizational level:

- Design and implement appropriate evidence-based programs and interventions to address alcohol abuse problems. Cultural differences need to be considered when developing evidence-based programs.

- Engage community institutions and trusted communication channels in changing health behaviors.

- Promote more community gardens, farmers markets and mobile produce markets to increase availability of fresh fruits and vegetables.

- Align preventive services and health literacy programs to promote screening behaviors, healthy eating and more active lifestyles.

- Conduct outreach to the uninsured to develop strategies to defray the cost of screening.

- Conduct more educational and awareness programs so that communities are aware of the available preventive and screening services.

At the Policy Level:

- Align resources and strategies through community centers and work sites to promote behaviors such as healthy eating, active living and screening. The service integration will benefit various health conditions including early cancer detection which are likely responsible for the burden of disability among this population.

- Support the Community Transformation Initiative to improve Houston/Harris County health in its promotion of "health in all policies".

Other Factors that Affect Health

- ◆ Environmental Health

- ◆ Crime

- ◆ Teen Sexual Activity and Contraceptive Use

- ◆ Maternal and Child Health

- ◆ Infant Mortality

Environmental Health

Water Pollution

Water pollution occurs when chemicals or other foreign substances contaminate our waterways. Contaminated surface water (water from bayous, lakes, rivers, and streams) and contaminated groundwater can adversely affect human health and the environment. (National Institute of Environmental Health Sciences [NIH], 2013). Pollutants can hamper the ability of a waterway to sustain aquatic life and can cause odor and taste problems in drinking water.

Harmful Effects: High levels of bacteria can be harmful to people. Their presence can indicate the existence of fecal matter or other waterborne pathogens. According to the U.S. Department of Health and Human Services, effects of exposure may include: vomiting or diarrhea, skin rash, some cancers, reproductive and developmental problems (U.S. Department of Health and Human Services, 2010).

Contributing Pollutants: Fertilizers and pesticides from agricultural runoff; sewage and food processing waste; lead, mercury, and other heavy metals; chemical wastes from industrial discharges; and chemical contamination from hazardous waste sites (NIH, 2013).

Environment-Related Problems in the Community

◆ Heavily developed residential, commercial, and industrial areas surround the water bodies in Area A.

◆ Bacteria is the most widespread and pervasive pollutant in Area A; however, PCBs and dioxins are also of great concern throughout tidal segments of the Houston Ship Channel and Clear Creek (Houston-Galveston Area Council Water Resources Information Map, 2013). Fish consumption advisories exist for some water bodies in the area.

◆ Sources of bacteria contamination may include wastewater treatment facility effluent with inadequate treatment, sanitary sewer system overflows and runoff contaminated with waste from pets and wildlife (Houston-Galveston Area Council Basin Highlights Report, 2013).

◆ PCBs and dioxins may derive from industrial point sources or urban runoff/storm sewers (Houston-Galveston Area Council Water Resources Information Map, 2013).

Information Source: Bureau of Pollution Control and Prevention/HDHHS, 2010

Percentage of residents with concerns for Area A

Water Pollution	Area A	Harris County
Water Pollutants	11.8%	10.2%
Drinking Water Quality	18.0%*	18.8%
Waste Pollution	**Area A**	**Harris County**
Dumping Waste	23.8%	16.6%

* In spite of the polluted surface water and waterways, the City of Houston drinking water is tested and safe to drink.

Water pollutants and dumping waste were more of concern for residents in Area A than those in Harris County. Particularly, residents were concerned about water contamination caused from harmful chemicals and run-off, drinking water that had an odd look, odor, or taste, and the dumping of waste in empty lots or ditches.

Data Source: HHS, 2010

Environmental Health

Air Pollution

Air pollution can have severe adverse effects on the overall health of the community. Out-of-hospital cardiac arrest (McNally et al., 2011) is a health effect associated with short-term exposure to air pollutants, including ozone and particulate matter (Ensor, Raun, & Persse, 2013), which have been among the triggers associated with cardiac arrest. Approximately 300,000 people in the United States experience an out-of-hospital cardiac arrest each year and over 90 percent of those cases result in death. The risk of cardiac arrest increases with a 20 parts per billion (ppb) increase in ozone three hours before the cardiac arrest event (EPA, 2006). Similar findings of increased risk of cardiac arrest were found for an increase of 6 µg/m3 particulate matter (PM2.5) one to two days before the cardiac arrest event (EPA, 2005). Risk of cardiac arrest is higher in the summer and among African Americans, males, and those over 64 years in age. Air pollution is also a trigger for asthma events.

Most Frequent Type of 311 Air Pollution Complaints for Area A
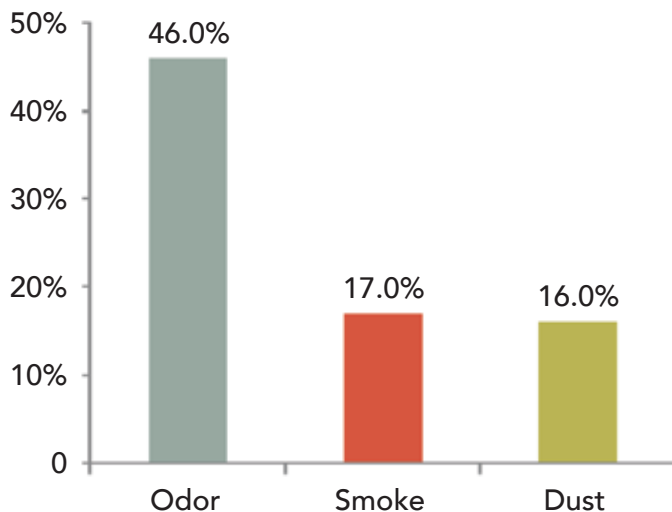
In 2012, 33.0% of the City of Houston "air pollution" complaints (received through calls to the City of Houston 311 telephone line) were from Area A. The most frequent types of air pollution complaints in 2012 were odor (46.0%), followed by smoke (17.0%), and dust (16.0%).

According to the Health of Houston Survey (2010), a higher proportions of residents in Area A reported that fumes from traffic (26.1%) and industrial (21.7%) manufacturing were environment-related problems in their community compared to those in Harris County (17.2% and 14.8% respectively).

Car emissions, manufacturing of chemicals, burning coal, oil, and other fossil fuels, dust, pollen and mold spores are some of the contributing factors of air pollution (Medline Plus, 2013b).

The U.S. Environmental Protection Agency (EPA) National Ambient Air Quality Standard (NAAQS) for 8-hour ozone concentration is 75 ppb (EPA, 2012b). During 2012, the air in Area A show more pollution than allowed by the national standards in five of the air monitoring stations in or near Area A: Houston Monroe, Park Place, Houston North Wayside, Houston Texas Avenue and Clinton (TCEQ, 2013). The EPA's annual health NAAQS for PM2.5 (12 µg/m3) was also exceeded in Clinton (TCEQ, n.d.).

Data Source: Bureau of Pollution Control and Prevention/HDHHS, 2010

Environmental Health and Safety
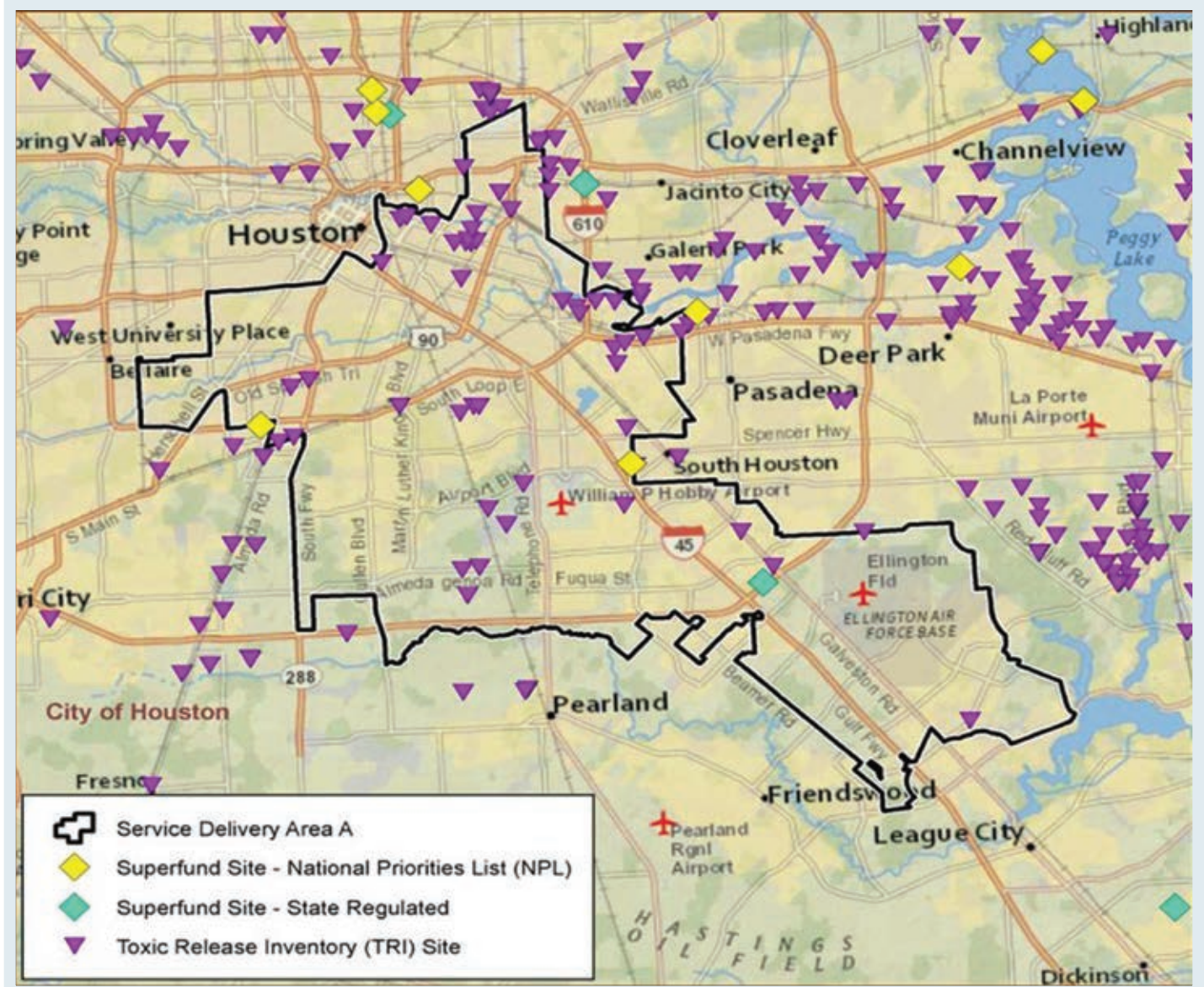
The Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) administer programs which monitor and regulate facilities with the potential to release significant amounts of hazardous chemicals into the environment. Chemical emissions and waste released into the environment can affect everyone. Awareness of regulated site locations and pollutant types may help residents to better understand the environmental hazards present in their community.

"A superfund site is an uncontrolled or abandoned place where hazardous waste is located, that can affect local eco-systems" (EPA, 2012a). There are 12 superfund sites within the Houston city limits, nine of which are on the National Priorities List (NPL). There are two superfund sites in Area A, one of which is on the NPL and located in Meadowbrook/Allendale. The other is located in the Edgebrook area.

"TRI tracks the management of toxic chemicals emitted to the air or water, or placed in some type of land disposal that pose a threat to human health and the environment" (EPA, 2013). There are 150 Toxic Release Inventory (TRI) sites within the Houston city limits; 42 of these are located in Area A.

Data Source: TCEQ, 2010 and EPA, 2012-2013

Crime

Offense Types (Rate per 1,000 Population)
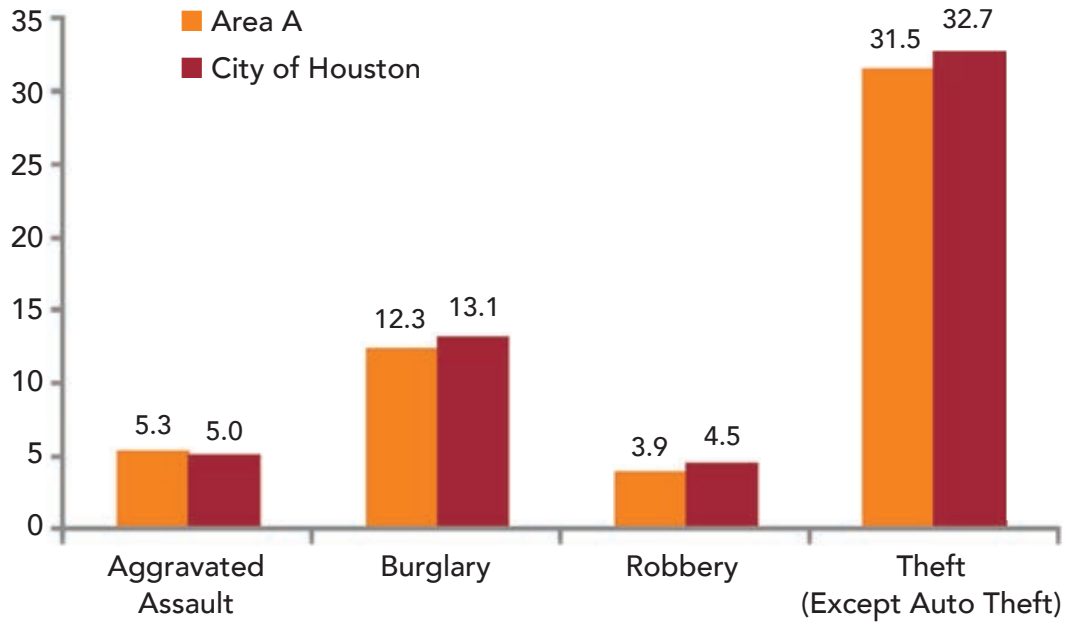
Crime is a public health issue that can have detrimental effects on physical health. By the end of 2012, the leading type of criminal offense in Area A was theft, occurring at a rate of 31.5 per 1,000 population which was comparable to the City of Houston's rate of 32.7 per 1,000 population. In Area A and the City of Houston, rates of theft were more than double the rates of burglary, and occurred approximately six times more often than aggravated assault. The rates of murders and rapes were similar for the City of Houston and Area A (0.1 and 0.3 per 1,000 population respectively, not shown above).

According to the Bureau of Justice Statistics, in the past 17 years, the U.S. burglary rate decreased 56.0 percent and there were 27.6 victimizations per 1,000 households (Walters, Moore, & Berzofsky, 2013). Roughly, the national rate of robbery is about 1.3 per 1,000 population, aggravated assault is 2.5 per 1,000 population, and the rate of theft is 20.1 per 1,000 population (The Federal Bureau of Investigation, n.d.). Rates of aggravated assault, robbery, and theft were higher in Area A than rates in the U.S. population.

Data Source: Houston Police Department Crime Report, December 2011-November 2012

Teen Sexual Behavior and Contraceptive Use

Sexual Behaviors Among High School Students (15-19 Years Old)
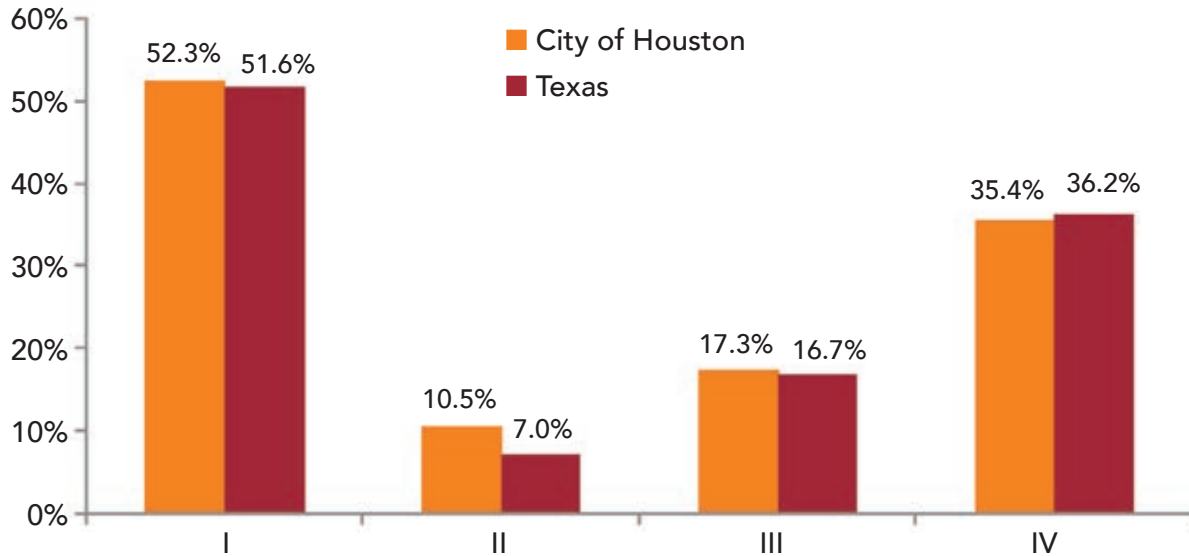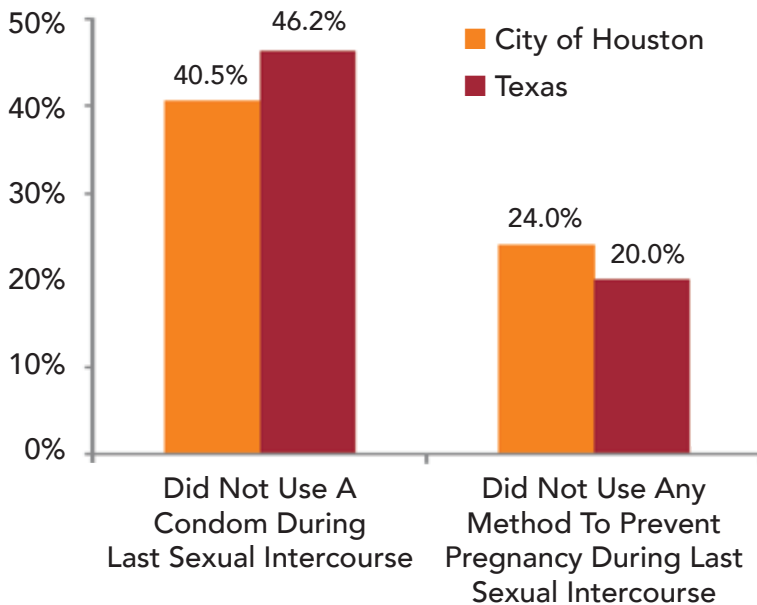

I) Ever Had Sexual Intercourse

II) Had Sexual Intercourse For The First Time Before Age 13 Years

III) Had Sexual Intercourse With Four Or More Persons

IV) Had Sexual Intercourse With At Least One Person (during the 3 months before the survey)

According to Youth Risk Behavioral Surveillance System data (2011), a higher proportion of high school students between the ages of 15 and 19 in the City of Houston reported having sexual intercourse for the first time before the age of 13, compared to high school students in Texas. There is no significant difference between the City of Houston and Texas high school students' responses when asked about sexual activity within the past three months.

Contraceptive Use Among High School Students (15-19 Years Old)

Approximately 41.0 percent of high school students in the City of Houston reported not using a condom during their last sexual intercourse, compared to 46.0 percent of Texas high school students. There is no significant difference between high school students in the City of Houston and Texas in terms of contraceptive use. However, high school students in the City of Houston reported higher proportions of not using any form of contraception during their last sexual intercourse as compared to Texas high school students.
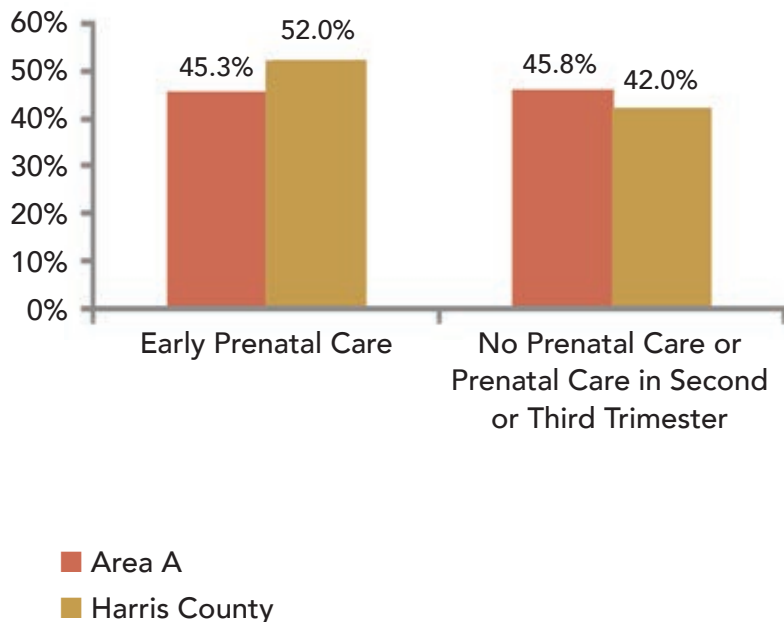
Data Source: Texas YRBSS, 2011

Maternal and Child Health

Annual Average — Teen Birth Rate, 2007-2011 (per 1,000 Girls 15-19)
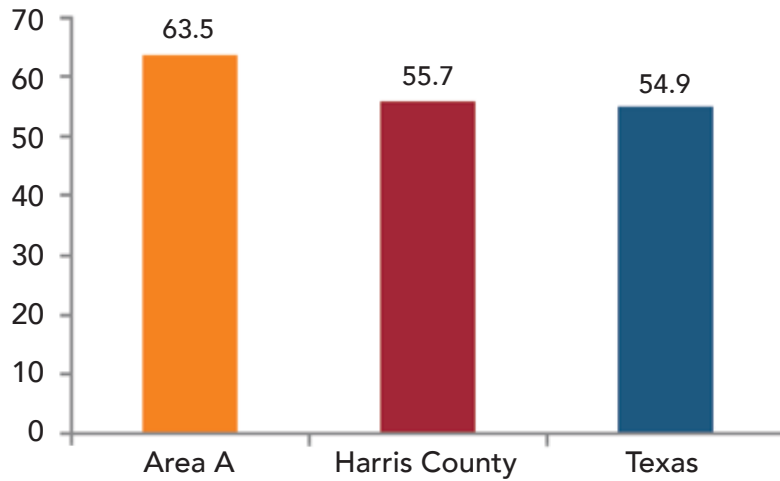
Nationally, the teen birth rate among girls between 15 to 19 years old declined eight percent from 34.3 births per 1,000 girls 15 to 19 years old in 2010 to 31.3 per 1,000 girls in 2011 (Hamilton, Martin, & Ventura, 2012). During 2007 to 2011, the annual average teen birth rate in Area A was higher than that of Harris County and Texas.

Chart values: Area A 63.5, Harris County 55.7, Texas 54.9

Received Early or No Prenatal Care or Prenatal Care in the 2nd or 3rd Trimester

Chart values: Early Prenatal Care — Area A 45.3%, Harris County 52.0%; No Prenatal Care or Prenatal Care in Second or Third Trimester — Area A 45.8%, Harris County 42.0%

Legend: Area A, Harris County

According to the Vital Statistics Unit, Department of State Health Services, from 2007-2011, only 45.3 percent of women in Area A received recommended early prenatal care in the first trimester, compared to 52.0 percent of women in Harris County. A slightly higher percentage of women in Area A received late or no prenatal care than those in Harris County (45.8% vs. 42.0%). The Healthy People 2020 goal was that at least 77.9 percent of females delivering a live birth received prenatal care beginning in the first trimester [Healthy People 2020, Objective 10.1] (Healthy People 2020, 2013c).

Data Source: Vital Statistics Unit, Center for Health Statistics, Texas, DSHS, 2007-2011

Maternal and Child Health

Low Birth Weight and Preterm Deliveries, 2007 –2011

Legend:
- Area A
- Harris County

Low Birth Weight: 9.4% (Area A), 8.8% (Harris County)
Preterm: 14.2% (Area A), 13.1% (Harris County)
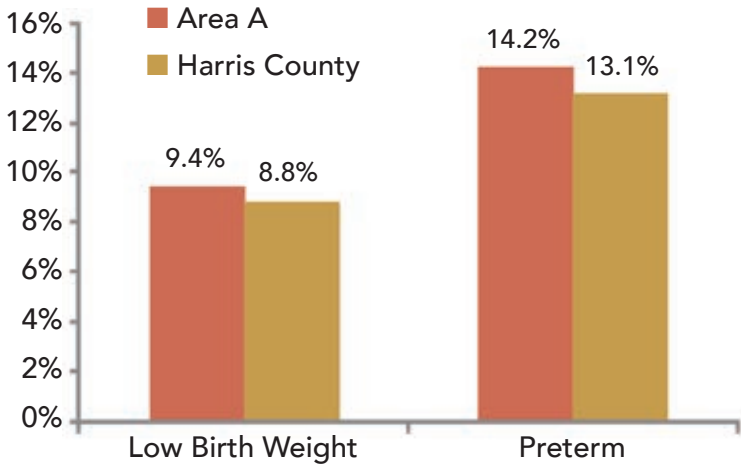
According to the Texas Vital Statistics Unit, Center for Health Statistics, low birth weight babies weigh less than 2,500 grams at birth. In Area A, low birth weight babies represented 9.4 percent of all births. Preterm births are defined as births at less than 37 weeks. In Area A, 14.2 percent of all births were preterm, as compared to 13.1 percent of births in Harris County.
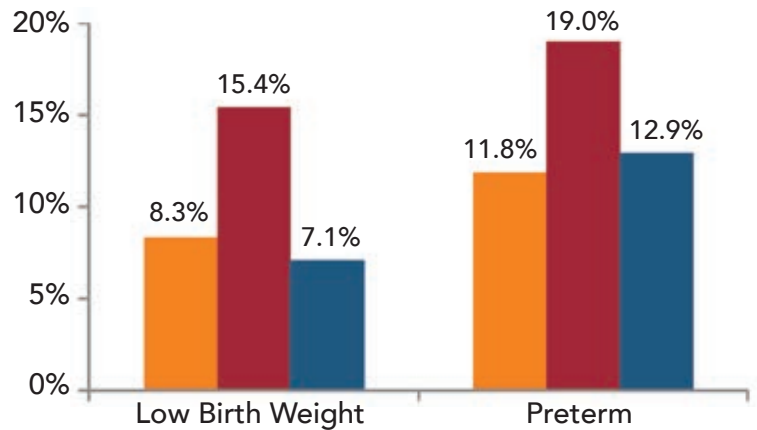
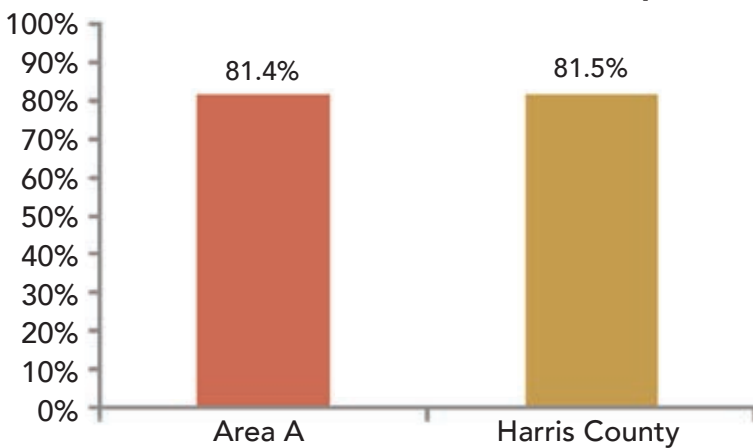## Low Birth Weight and Preterm Deliveries By Race/Ethnicity

Legend:
- White Non-Hispanic
- Black Non-Hispanic
- Hispanic

Blacks had higher proportions of low birth weight babies and preterm births in Area A compared with Whites and Hispanics.

Data Source: Vital Statistics Unit, Center for Health Statistics, Texas, DSHS, 2007-2011

Low Birth Weight: 8.3% (White Non-Hispanic), 15.4% (Black Non-Hispanic), 7.1% (Hispanic)
Preterm: 11.8% (White Non-Hispanic), 19.0% (Black Non-Hispanic), 12.9% (Hispanic)

Immunization Series Completion Among Daycares, 2012-2013

Area A: 81.4%
Harris County: 81.5%

Immunization series completion among children in daycare settings in Area A (81.4%) was comparable with that in Harris County (81.5%).

Note:

1. Series completion percentages were calculated by dividing the number of children who were up to date with their vaccines by the total number of children at the daycare during the time of assessment.

2. Age-specific antigens were taken into account, so only children that should have had the vaccine were counted.

3. Shot records of children in Harris County's daycares were reviewed for the following vaccines: Hepatitis B, Hepatitis A, Varicella, DTap (Diphtheria, Tetanus, Pertussis), MMR (Measles, Mumps, Rubella), Polio, Hib (Haemophilus Influenza Type B) and PCV (Pneumococcal conjugate).

Data Source: Bureau of Immunization/HDHHS, 2012-2013

Infant Mortality

Annual Average - Infant Mortality Rate, 2007-2011 (per 1,000 Live Births)
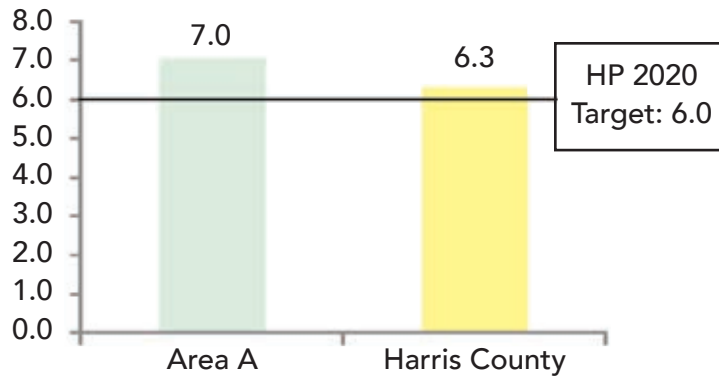
HP 2020 Target: 6.0

The Healthy People (HP) 2020 target is to reduce infant mortality to 6.0 deaths per 1,000 live births (Healthy People 2020, 2013d).

A slightly higher infant mortality rate was found in Area A than Harris County.

Area A Annual Average Infant Mortality Rate by Race/Ethnicity, 2007-2011 (per 1,000 Live Births)
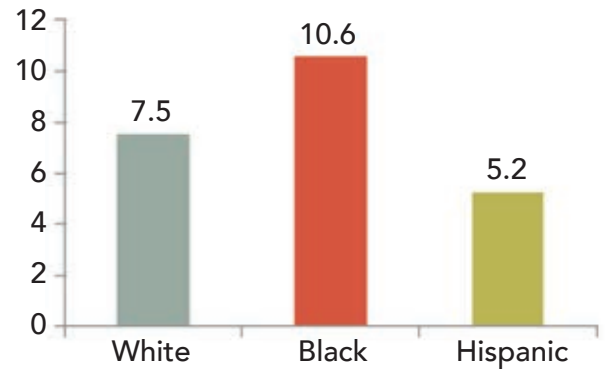
Similar to the City of Houston, infant mortality rate was higher among Blacks in Area A as compared to other race/ethnicity.

Infant Mortality Rate Map (By ZIP Code)

Infant mortality rates are highest in ZIP codes (77021, 77030, and 77051) that overlap with the following neighborhoods in Area A respectively: - Greater OST/South Union - Astrodome Area - Medical Center Area - MacGregor - University Place - Sunnyside.
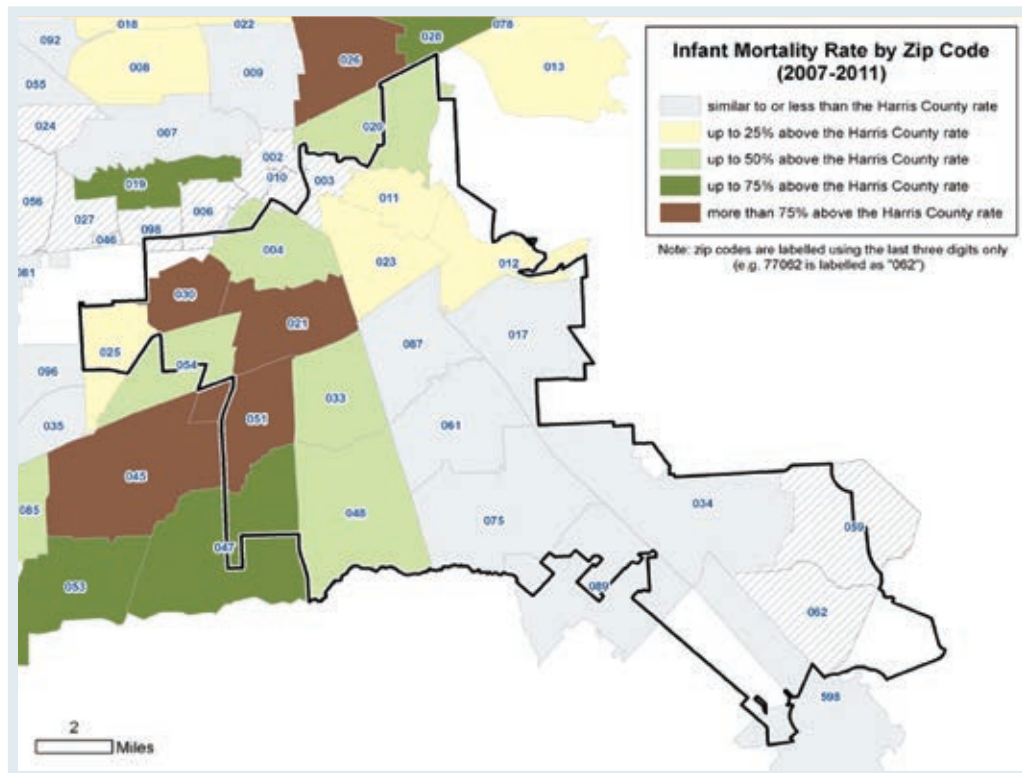
Data Source: Vital Statistics Unit, Center for Health Statistics, Texas, DSHS, 2007-2011

Summary and Recommendations

Summary

- Air pollution from fumes, odors, and traffic and industry smoke are reported environmental concerns for residents.

- Water pollution (chemical contamination, run-off, and the look, taste, and odor of drinking water) and the dumping of waste are some of the other environmental concerns residents have.

- Currently there are two superfund sites in the area, and one of the sites is on the NPL located in Meadowbrook/Allendale area.

- Crime is also a concern in Area A and the leading type of criminal offense is theft (31.5 per 1,000 population).

- Reports from students 15 to 19 years old in the City of Houston found that a high proportion had their first sexual intercourse encounter before the age of 13 and approximately 24 percent did not use a contraceptive during their last sexual encounter.

- The teen birth rate among girls 15 to 19 years old is higher in Area A than that of Harris County and national average.

- About 45 percent of pregnant women received prenatal care in their first trimester, and approximately 14 percent of all births were preterm deliveries.

- Approximately 81 percent of children in daycare completed their immunization series.

- The current infant mortality rate in Area A is 7.0 per 1,000 live births.

- Blacks have higher proportions of low birth weight babies, preterm births, and infant mortality.

Recommendations

- Increase knowledge and awareness of environmental hazards and the harmful effects of air pollution and water contamination.

- Ensure facilities are practicing source reducing approaches to prevent pollution and reduce toxic chemical and pesticides release in the environment.

- Educate youth on safe sex practices and the consequences of teenage pregnancy.

- Enforce regulatory programs that address environmental issues within the community.

- Facilitate the implementation of more efficient training on safety for workers.

- Promote evidence-based education on teen pregnancy, contraception use, and prenatal care.

- Introduce evidence-based strategies that promote early prenatal care.

- Implement evidence-based programs to address birth outcomes among Blacks.

- Implement evidence-based youth violence prevention programs.

- Examine the possibility of expanding lessons learned from STRYVE project.

Program Initiatives

HIV Screening

Sunnyside

- **African American State Emergency Task Force/HDHHS HIV/STD Bureau -** provided HIV/STD testing, education and outreach to the Sunnyside community on Feb 7th. Approximately 1,480 people received HIV/STD information and condoms. Sixty-two people were tested at Sunnyside Multiservice Center (SSMSC). **(Event held annually)**

- **Healing the Family—PHAT (Promoting Health among Teens) -** teaches abstinence only through a 28 hour curriculum. The program is designed to empower adolescents to change their behavior in ways that will reduce their risk of becoming infected with HIV or other STDs while significantly decreasing their chances of experiencing unintended pregnancies. Specifically this program advocates postponing sexual activity and emphasizes that abstinence is the only way to completely eliminate their risk for STDs, HIV and pregnancy. This is a lively and exciting curriculum for students that are very interactive and student-centric. Students participate in talking circles, brainstorming, and role-playing. The program also includes DVDs, exercises, and games that make learning enjoyable. **(Program is on going)**

- **HIV/STD testing: Family Planning Services and Male Health -** Sunnyside Health Center (On-going)

- **HIP HOP for HIV -** the largest month long city-wide HIV testing event that promotes HIV awareness, education, and provides free confidential HIV and syphilis testing to Houston's young adults. **(Annually June-July)**

Cancer Screening:

Sunnyside

- **Project VALET -** offers free mammograms to women age 40 and older living in Houston, who do not have health insurance or a Harris Healthy System "Gold Card". This project is a joint effort of MD Anderson Cancer Center, the Rose, the Houston Department of Health and Human Services (HDHHS) and Spring Branch Community Health Center. Project VALET provides mammograms by arranging for MD Anderson's Mobile Mammography van to regularly visit several of the city's health clinics. Screenings will be available throughout 2014. **(Program is offered on an on-going monthly)**

Third Ward

- **The Educational Program to Increase Colorectal Cancer Screening (EPICS) -** is a project of the National Black Leadership Initiative on Cancer (NBLIC) to educate African Americans about colorectal cancer risk reduction and screening. **(Classes were held February 13th, 20th and 27th 2013)**

Smoking/Alcohol Consumption:

Sunnyside

- **Center for Wellness and Recovery Resources -** provides an ongoing professional relationship to help individuals who are in or who are considering recovery from addiction to produce extraordinary results in their lives, careers, businesses, or organizations—while advancing their recovery from addiction. **(On-going)**

- **Cradles Project (The Council on Alcohol & Drugs) -** provides case management for pregnant and postpartum women in the Houston area that are at risk for substance abuse. **(Service offered every Tuesday and Wednesday 1:00-3:00pm— On-going)**

Denver Harbor

- **Cradles Project (The Council on Alcohol & Drugs) -** provides case management for pregnant and postpartum women in the Houston area that are at risk for substance abuse. **(Service offered on Wednesdays—On-going)**

Fruit/Vegetable Consumption and Physical Activity

Sunnyside

- **Neighborhood Centers Inc. (NCI) -** offers free fitness programs to individuals 60 years of age and older. **(Mondays 9:30am—11:30am—On-going)**

- **HDHHS Senior Program -** offers daily meals, health education and physical fitness classes and field trips for seniors. **(Monday—Friday—On-going)**

- **Sunnyside Community Center -** offers a wide array of educational & recreational programs for all ages and abilities to enjoy and participate in.

Program Initiatives

Denver Harbor

◆ **Denver Harbor Senior Center -** offers daily meals, health education and physical fitness classes and field trips for seniors. **(Monday—Friday—On-going)**

Third Ward

◆ **Neighborhood Centers Inc. (NCI) -** offers daily meals, health education and physical fitness classes and field trips for seniors. **(Monday—Friday—On-going)**

◆ **Third Ward Line Dancers -** provides instruction in the latest line dances while encouraging participants to remain active. Open to all levels of fitness. **(Mondays 11:30am—2:30pm On-going)**

◆ **DAWN Center (Diabetes Awareness Wellness Network) -** offers a variety of wellness services for adults who have been diagnosed with diabetes, pre-diabetes, or have risk factors for diabetes. The center will have fitness, nutrition, and cooking classes. **(Tuesdays and Thursdays 9:00am—4:00pm—On-going)**

◆ **Emancipation Park and Recreation Center -** a wide array of educational & recreational programs for all ages, abilities to enjoy & participate in.

Magnolia

◆ **Neighborhood Centers Inc. (NCI) -** offers daily meals, health education and physical fitness classes and field trips for seniors. **(Monday—Friday On-going)**

Multiple Locations

◆ **The Get Moving Houston Farmers Market -** Program launched its first market in March of 2011 through a grant funded opportunity from the Texas Department of State Health Services. In 2011 alone, HDHHS hosted 36 markets with the help of neighborhood and community partners. Our mission is to bring fresh fruits, vegetables, dairy and grains and one day meat/poultry/fish to communities that are underserved by grocery stores and other fresh food retail outlets. HDHHS implemented and demonstrated the effectiveness of Farmers Markets within food desert communities: Sunnyside, Magnolia and Fifth Ward. These communities consist of over 45% residents that live below national poverty rates, have low literacy rates, have high chronic disease prevalence and lack sufficient access to quality and affordable produce. It is no surprise that recipients of federal supplemental nutrition assistance programs (SNAP) reside within these communities. Therefore, a natural progression of the markets is to permit both farmers and consumers to capitalize on the opportunity to sell or access fresh, quality and affordable produce. Farmers benefit from an additional revenue opportunity, residents benefit from being able to utilize SNAP funds for high quality produce within their neighborhoods and the City benefits by aiding residents in making healthy lifestyle modifications. **(Markets are held at Sunnyside 1st Thursday of the month and Magnolia 2nd Thursday of the month - On-going (seasonal)**

◆ **Community Garden Program -** promotes healthy communities and provides food security for low income persons living in the community. Community residents can volunteer to work in the garden and receive the harvest for free. **(Community gardens are located at Sunnyside, Denver Harbor and Third Ward)**

◆ **WIC:** WIC is a free nutrition program that helps pregnant women, new mothers, and young children eat well, learn about nutrition and stay healthy. Nutrition education and counseling, nutritious foods and help accessing health care are provided to middle to low-income women, infants, and children through the Special Supplemental Nutrition Program, popularly known as WIC. U.S. citizenship is not required. **(WIC locations: Sunnyside, Denver Harbor and Magnolia)**

◆ **Farmers Market/WIC Voucher Program:** WIC clients and eligible children in the household receive a one-time $20 voucher to be redeemed at the Farmers Market **(Sunnyside and Magnolia)**

Environmental Health

LINK Written Process - LINK bridges practices between programs and disciplines with a shared vision & mission, removes physical and program barriers, and if done right, weaves engagement full circle helping HDHHS meet public health accreditation standards including environmental programs.

Goal: Promote linkages engaging east end community systems with Area A and Pollution Control and Prevention resources to help address quality of life in the community.

Program Initiatives

CRIME

◆ Area A has a close relationship with HPD and Precinct Constable.

◆ Area A has a Store Front at Denver Harbor Multi Service Center.

◆ In 2011, Houston Department of Health and Human Services (HDHHS) received a five-year planning and capacity building grant to implement **STRYVE** (Striving to Reduce Youth Violence Everywhere) **Houston** – a youth violence prevention initiative funded by the Centers for Disease Control and Prevention (CDC), Division of Violence Prevention, that utilizes a public health approach to prevent youth violence before it starts. Key Stakeholders of **STRYVE Houston** are the Mayor's Anti-Gang Office, Houston Police Department (HPD), HPD Youth Advisory Council, Houston Parks and Recreation, City of Houston Public Works, Engineering, and Neighborhood Services Departments, Harris County Precinct 1, Council for a Safer County, Houston Independent School District, Keep Houston Beautiful, Parents for Public Schools of Houston, University of Houston Prevention Resource Center, St. Luke's Episcopal Health Charities, Communities in Schools, Gulf Coast Community Services Association, faith-based organizations, United Way of Greater Houston, local businesses and adolescent leaders have been involved in STRYVE Houston.

Teen Pregnancy

◆ Area A in collaboration with Healing the Family are educating teens to prevent pregnancy by abstinence.

◆ Area A is presenting the PHAT Program

◆ Healing the Family Inc. staff will administer a 28 hour Abstinence-Only Intervention Program to groups of 15 to 25 youth within the ages range of 10 to 18. Classes will be held at the Sunnyside Multipurpose Center twice a week for 2 to 3 hours a day.

◆ In the original study conducted by Jemmott, and Fong (2010) a randomized control trial was conducted to test the effects of the PHAT! Abstinence Intervention. In the research study the eight hour curriculum was implemented in a small group setting with a total of 662 African American students in grades 6 and 7 ages, between 10 and 15 years old. The participant who participated in the intervention reduced sexual initiation ($p=.03$). The abstinence-only intervention also significantly reduced recent sexual intercourse compared to the control group ($p=.02$, 33.5% in the abstinence-only intervention as compared to 48.5% in the control group).

Prenatal Care

Area A in collaboration with The Neighborhood Centers Inc. SUNNY FUTURES Healthy Start program will host community-based prenatal education classes utilizing the March of Dimes Comenzando bien curriculum. Comenzando bien® is a prenatal curriculum designed for pregnant women to learn about having a healthy pregnancy in a supportive group setting. It also provides culturally relevant social support/prenatal education for pregnant Hispanic women and demonstrates improved birth outcomes/ behavior change. The March of Dimes Becoming A Mom® curriculum will be utilized in the event that enough interest is generated from English-speaking or bilingual mothers who prefer to have prenatal education taught in the English language.

Some of the other programs in Area A are:

◆ Clothing Closet

◆ Central Care Clinic

◆ San Jose Clinic

◆ El Centro de Corazon Clinic

◆ Enrichment after School Program at Denver Harbor

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Super Neighborhoods in Area A

- ◆ ASTRODOME AREA
- ◆ BRAESWOOD
- ◆ CLEAR LAKE
- ◆ DENVER HARBOR / PORT HOUSTON
- ◆ EDGEBROOK AREA
- ◆ GOLFCREST / BELLFORT / REVEILLE
- ◆ GREATER EASTWOOD
- ◆ GREATER HOBBY AREA
- ◆ GREATER OST / SOUTH UNION
- ◆ GREATER THIRD WARD
- ◆ GULFGATE RIVERVIEW / PINE VALLEY
- ◆ HARRISBURG / MANCHESTER
- ◆ LAWNDALE / WAYSIDE
- ◆ MACGREGOR
- ◆ MAGNOLIA PARK
- ◆ MEADOWBROOK / ALLENDALE
- ◆ MEDICAL CENTER
- ◆ MINNETEX
- ◆ MUSEUM PARK
- ◆ PARK PLACE
- ◆ PECAN PARK
- ◆ SECOND WARD
- ◆ SOUTH ACRES / CRESTMONT PARK
- ◆ SOUTH BELT / ELLINGTON
- ◆ SOUTH PARK
- ◆ SUNNYSIDE
- ◆ UNIVERSITY PLACE

COMMUNITY HEALTH PROFILE

Health Service Delivery Area A
(South and South East)
2014

Houston Department of Health and Human Services

Houston Department of
Health and Human Services