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# **2011 Integrated Epidemiological Profile for HIV/AIDS Prevention and Care Planning**

## **Houston HSDA & EMA**

**Council Approved April 14, 2011**

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# EXECUTIVE SUMMARY

## SOCIODEMOGRAPHIC DATA

The Houston-Area EMA is comprised of six counties and the HSDA includes these six plus four others. The population center of the region is Harris County, with over 80% of the EMA population and nearly 79% of the HSDA population. Outside Harris County most counties are rural with three EMA counties and two HSDA counties reporting 60% or more rural residents. The populations of both the EMA and HSDA are projected to grow at a faster rate than Texas overall, 18% compared to 16% for the state. The fastest growing counties are those adjacent to Harris, and include Montgomery (29%), Fort Bend (27%) and Waller (26%).

In Harris and Fort Bend Counties, minorities make up the “majority” of residents. White/Anglo are the majority in all other counties.

- ⌘ Hispanics/Latinos make up 30% of the EMA’s and HSDA’s populations and 32% of the state’s.
  - Twenty percent of EMA and HSDA residents were born outside the U. S. This compares to 14% in the state of Texas. These foreign born residents most frequently come from North, Central and South America.
  - Mexico is the most frequent place of foreign birth, accounting for about half of those born outside the U. S.
  - Approximately one-third of EMA and HSDA residents are “linguistically isolated,” meaning they speak English less than “very well.” The predominant second language is Spanish.
- ⌘ Non-Hispanic Blacks/African-Americans are 17% of the people in the region compared to 11% in Texas.
- ⌘ Asians are 5% of the local population and less than 3% of those living in the state. Fort Bend County has the largest percentage of Asian residents.

Both the EMA and the HSDA have higher median incomes than the state overall. Within the EMA, the median income is nearly \$47,000 per year and within the HSDA, the median income is \$42,000. This compares to just under \$40,000 for Texas. Fort Bend (\$64,000 per year) and Montgomery (\$50,000 per year) have the two highest median incomes as well as the highest levels of educational attainment.

The EMA and HSDA have lower poverty rates than Texas overall, but the poverty rate is higher than found throughout the U. S. The region has approximately 14% poverty; the state has 15.4%, and the U. S. has only 12.4%.

As a state, Texas ranked first in the U. S. in 1998 according to percent of population uninsured (24.5%) and second in size of the uninsured population (4,880,000). In the

10-county area, counties ranged between one-fifth and one-quarter of their populations uninsured. In addition, all of the HSDA counties have full or partial designation as medically underserved areas (MUA). Six entire counties are designated as medically underserved.

- ✚ Liberty County, the county with the highest unemployment in the region, has the highest mortality rate of the 10 HSDA Counties, ranking thirteenth in the state of Texas. They have the highest infant mortality rate in the state, and are in the top 15 for cancer, lower respiratory diseases and accidents.
- ✚ Fort Bend has the lowest death rate of the ten HSDA counties, ranking 197 in the state.

### **SURVEILLANCE DATA**

At the end of 2007, a total of 19,393 people were living with HIV/AIDS in the Houston HSDA, more than half (11,232; 58%) of whom had an AIDS diagnosis. There were 914 newly reported HIV cases, and 933 new AIDS cases for the year.

There are people living with HIV/AIDS in all 10 HSDA counties with 94% of cases reported in Harris County.

Males have an HIV prevalence rate that is two times higher than that of females, and an AIDS prevalence rate that is three times higher. However, there are indications of an increase in new HIV infections among women, who represent 31% of living HIV cases in both the EMA and HSDA, but only 23% of living AIDS cases.

Blacks/African-Americans have the highest rate of new HIV and new AIDS infections – almost six times higher than the infection rate for Hispanics/Latinos and more than seven times higher than that of Whites/Anglos. More than half of new diagnoses for both HIV and AIDS are among Blacks/African-Americans (55%), followed by Hispanics/Latinos (24%) and Whites/Anglos (19%). Black/African-American women constitute the largest percentage (73%) of newly diagnosed women of childbearing age. Hispanic men are infected with HIV at a rate of more than 4 times that of Hispanic/Latina women, and 4 times higher for AIDS. There is also an increase in new HIV and AIDS diagnoses among Hispanic MSMs.

The 25 to 44 age group has the highest rates of new HIV and AIDS infections. The HIV infection rate among youth aged 13 to 24 is over two times higher than their rate for AIDS diagnoses. Black/African-American youth in particular are disproportionately affected by HIV/AIDS.

Male to male contact accounts for 42% of all HIV/AIDS cases in the HSDA, followed by heterosexual contact (24%) and intravenous drug use. Unreported risk among those with HIV accounts for approximately 28% of new HIV diagnoses and 17% of AIDS diagnoses.

## **SERVICE UTILIZATION**

Service utilization, other than primary care, is evaluated using the CPCDMS system, which includes Ryan White Part A and B data. Utilization patterns on primary medical care, case management, dental care, substance abuse treatment, mental health therapy and counseling and ADAP services are compared to surveillance data on those living with HIV disease. *Please note that the most current epidemic data for this report is 2007 data from DSHS HARS, while service utilization data from the CPCDMS is from 2008.*

### **PRIMARY MEDICAL CARE:**

- ⓧ White PLWHA are under-represented in primary medical care services.
- ⓧ Primary care is accessed proportionately by PLWHA of all ages and both genders.

### **CASE MANAGEMENT:**

- ⓧ White PLWHA is under-represented in case management, while Black PLWHA account for a higher proportion of clients than the regional epidemic.
- ⓧ Overall, case management utilization is proportional by age and gender.

### **DENTAL CARE:**

- ⓧ There is a disproportionately higher access of dental care by older adults.
- ⓧ Black/African-American PLWHA are under-utilizing dental services, while Hispanics are slightly overrepresented among those who use dental services.

### **SUBSTANCE ABUSE TREATMENT:**

- ⓧ Treatment is under-utilized by Hispanics and disproportionately used more by White PLWHA.
- ⓧ Adults aged 25-44 tended to utilize this service more, while there is under-representation in substance abuse clients for older adults aged 55+.

### **MENTAL HEALTH THERAPY AND COUNSELING:**

- ⓧ White PLWHA account for a higher proportion among those utilizing services when compared to their proportion among the epidemic. Noteworthy is that White males account for the largest proportion of mental health clients.
- ⓧ Black PLWHA are under-represented among those utilizing mental health services.
- ⓧ From 2006 to 2008, there appears to be a trend towards more rural clients while service utilization decreased for adults aged 25 to 34 and increased for older adults aged 55+.

**ADAP:**

- Ⓡ Hispanic PLWHA over-utilized ADAP services while White PLWHA appear to be under-represented among ADAP clients when compared to their distribution within the regional epidemic.
- Ⓡ Usage by gender and age group appear to be proportional when compared to the regional epidemic.

**UNMET NEEDS ESTIMATES**

Identifying people who are aware of their HIV positive status and who are not receiving HIV medical care is a Health Resources Services Administration (HRSA) mandate, and a central focus of regional and national planning. One of the first steps in designing effective interventions is identifying the number and characteristics of those who are out-of-care, known as the “unmet need.”

Unmet need for medical care is defined following the HRSA definition such that a PLWHA is said to have unmet need for medical care if there is no evidence of either a CD4 count, a viral load (VL) test or antiretroviral therapy (ART) during the 12 months of interest. If there is evidence of one of these three things being present, the person is considered to have their medical needs met.

As of December 31, 2007, the number of PLWA was 11,358 and the number of PLWH (non-AIDS, aware) was 7,891. The total number of people living with HIV and AIDS in the Houston EMA was 19,249.

The number of PLWA in care was 7,766, or 68% of the total number of PLWA in the Houston EMA as of December 31, 2007. The number of PLWH (non-AIDS, aware) in care was 4,303 (55%) among all PLWH in the EMA. The total number of PLWHA who received HIV primary medical services as of the end of 2007 was 12,069 (63%).

Using the inputs for care patterns obtained, the Houston EMA estimates that 3,592 (32%) of the diagnosed PLWA were not receiving HIV primary medical care. For PLWH, 3,588 (45%) were found to be out-of-care. After combining the two groups, the total number of PLWHA who had unmet need in the Houston EMA through the end of 2007 was 7,180 (37%) among all PLWHA. Please note that estimates provided by TDSHS indicate that the Houston EMA has the highest level of unmet need (37% by their estimates) when compared to other EMAs in the state (Fort Worth 31%, San Antonio 30%, Dallas 26% and Austin 23%).

# INTRODUCTION

In order to effectively plan and implement HIV prevention and care services, local organizations require profiles of individuals who are infected with and at risk for acquiring HIV disease. Information about who is infected, their backgrounds and risk factors lay the foundation for local and regional prevention and care planning. This epidemiological profile provides detailed information about the current HIV/AIDS epidemic in the Houston Eligible Metropolitan Area (EMA) and Health Service Delivery Area (HSDA). The Houston EMA includes a six county area with Harris County/Houston at the center. Other counties comprising the EMA include: Chambers, Fort Bend, Liberty, Montgomery and Waller. The HSDA is composed of these six plus Austin, Colorado, Walker and Wharton counties.

The Health Resources Services Administration (HRSA), the organization that oversees federal funding for care of people living with HIV and AIDS (PLWHA) through Ryan White Program Parts A through F, and the Centers for Disease Control and Prevention (CDC), the organization that is responsible for HIV surveillance and prevention activities, have recently drafted guidelines for epidemiological profiles that bring together information from HIV care, surveillance and prevention. These guidelines identify five key questions that should be answered by the epidemiological profile. These include:

1. What are the sociodemographic characteristics of the general population in your service area?
2. What is the scope of the HIV/AIDS epidemic in your service area?
3. What are the indicators for risk of HIV infection and AIDS in the population covered by your service area?
4. What are the patterns of service utilization of HIV-infected persons in your area?
5. What are the number and characteristics of persons who know they are HIV-positive but who are not receiving HIV primary medical care?

This epidemiological profile is organized around these five questions, with each representing a section of the report.

## **DATA SOURCES**

Data were compiled from a variety of sources to provide the most complete picture of the HIV epidemic in the Houston EMA/HSDA. When interpreting the data, keep in mind that each data source has strengths and limitations. A brief description of each data source follows.

### **SOCIODEMOGRAPHIC DATA**

#### **U. S. Bureau of the Census (Census Bureau)**

The government, through the Bureau of the Census, collects and provides information about the people and the economy of the United States. The Census Bureau's website ([www.census.gov](http://www.census.gov)) includes data on demographic characteristics of the population, such as age, race, Hispanic ethnicity and gender/sex. It also provides information on family structure, educational attainment, income level, housing status and the proportion of people who live at or below the poverty level.

Information is available for very small geographic areas, such as block groups, but for this analysis county-level data is used. Totals for the six county EMA and the ten county HSDA are provided. In most cases, statewide information for Texas is provided for comparison.

When collecting data, the Census Bureau collects information on race and ethnicity separately. Therefore, Hispanic ethnicity is collected for people of both white and black races. Within race, however, it is possible to identify members of each race that are non-Hispanic. In order to provide information that is consistent and comparable to the HIV surveillance data, this report differentiates people who are White/Anglo, non-Hispanic, black non-Hispanic and Hispanic. Some information, such as poverty, is only collected by race (white, black, Asian) with ethnicity (Hispanic or non-Hispanic) included as a separate category. In these cases, direct comparisons from population data cannot be made (e.g. the racial breakdown of the population cannot be compared with the racial breakdown of those living in poverty).

#### **Texas Comptroller's Winter 2001-2002 County Forecast**

County and state population projections to 2010 are from this source. Projections are based upon the 2000 U. S. Census.

#### **Texas Department of Labor**

While the Census Bureau provided unemployment data from 2000, more current information is available from the Texas Department of Labor. Average unemployment from 2003 is used.



## Texas Department of State Health Services (DSHS)

The Texas Department of State Health Services (DSHS) collects county-level data for a range of health status indicators. These include natality and morbidity and mortality for a range of diseases. For this profile, DSHS's publication, "Selected Demographic and Public Health Measures: Rankings for Texas Counties 1998-2000," is used. This report combines data from 1998 through 2000, and provides county rankings from highest to lowest, with identical values given the same rank. Mortality and morbidity measures with 20 or fewer numerator events in the three-year period are not ranked and designated as "NR." Natality measures based on a denominator of 20 or fewer are also not ranked. Mortality data used in this report were age-adjusted using the 2000 standard population. The system for coding of mortality changed between 1998 and 1999. Please refer to the full report for an explanation of these changes.

DSHS data is also used for Medicaid enrollment statistics. These were taken from the DSHS website by county.

## HIV/AIDS SURVEILLANCE

AIDS was made a reportable disease in the State of Texas in March of 1983, while HIV infection became voluntarily reportable in 1987. In February 1994, the Control of Communicable Disease Act of Texas was amended to expand the information that must be reported for an HIV infection. The new regulations required name based reporting for all HIV-infected individuals less than 13 years of age. Laboratories that perform CD4 testing have been required to report suspect AIDS cases (those with a CD4 count below 200 or a CD4 percent below 14%) since January 1994. In January 1999, HIV infection became reportable for all persons who have a diagnostic test performed after 1998. On January 1, 2000, a detectable viral load was added to the reportable diagnostic tests.<sup>1</sup>

Texas is one of several states that have unique HIV/AIDS reporting. Whereas most states are responsible for all HIV/AIDS reporting, six Texas cities are designated as independent reporting sites. To ensure complete HIV/AIDS reporting at the state level, Houston transfers its data to the State who then provides this data to the Centers for Disease Control and Prevention. With the initiation of name-based reporting of HIV, and to standardize reporting jurisdictions for all communicable diseases, the Houston Department of Health and Human Services (HDHHS) reporting jurisdiction was modified to include only Houston and Harris County. Since 1989 Houston has received direct funding from the CDC to conduct HIV/AIDS surveillance.

<sup>1</sup> The Houston Department of Health and Human Services (HDHHS) conducts HIV/AIDS surveillance as authorized in the Texas Administrative Code, Title 25, Part 1, Chapter 97. Rule §97.132 of Subchapter F. This requires physicians, dentists, hospitals, clinical laboratories and certain school officials to report HIV and AIDS to the local health authority. The Surveillance Program collects data in accordance with Rule §97.133 of Subchapter F which requires that reports of AIDS, HIV infection, CD4+T lymphocyte cell count below 200 cells/microliter, or CD4+ T-lymphocyte percentage of less than 14% shall be made using all of the information (collected by the reporting entities listed in Rule §97.132) found in the most current version of forms CDC 50.42B, CDC 50.42C, or STD-28.



HIV and AIDS data are systematically collected and entered into the HIV/AIDS Reporting System (HARS) developed by the CDC. A systematic surveillance system has been established to ensure that data is as complete as possible and quality assurance procedures are in place.

### **DATA LIMITATIONS**

The data for HIV may not be representative of the epidemic in the population in that some individuals may not know they are positive therefore do not test. In addition, individuals who choose to test anonymously rather than confidentially, will not be reported or contribute to an accurate picture of the epidemic.

HIV data has not been reportable for as many years as has AIDS in Texas, therefore HIV data is not as complete as AIDS data and trend analysis of HIV data cannot be properly performed.

In addition, reporting lags may contribute to underestimations in the data. Although every effort is made to identify sources of AIDS and HIV reports, HIV/AIDS recent data is not complete.

When data reports, encompass two jurisdictional areas, data are affected by reporting schedules. For example, Houston data includes only the City of Houston and Harris County. Any reports that would require Houston data also, would have to come through the Texas HARS system. Reporting delays or data cleaning at the State level would not allow a complete and timely picture.

### **HIV/AIDS CORE SURVEILLANCE PROJECTS**

The HIV/AIDS Core Surveillance Program consists of the following projects: HIV/AIDS Surveillance, Expanded HIV Risk Assessment Project (EHRAP) and Sampling for Transmission Risk (STR). The Program also has the following Supplemental Projects: Enhanced Perinatal Surveillance (EPS), Adult Spectrum of Disease Project (ASD), HIV Testing Survey (HITS), Supplement to HIV/AIDS Surveillance (SHAS), Survey of HIV Disease and Care (SHDC), Behavioral Surveillance, HIV Incidence Surveillance and the Program Evaluation Project. The special projects are designed to capture information about HIV/AIDS that are beyond the scope of core surveillance. These studies are conducted in select populations and may not be representative of the epidemic in the general population. These studies are also time sensitive and limited in scope.

## **CENTRALIZED PATIENT CARE DATA MANAGEMENT SYSTEM (CPCDMS)**

Houston's Centralized Patient Care Data Management System (CPCDMS) is a computer database application that compiles and tracks health, demographic and service utilization. The system enables Ryan White Part A funded agencies and other users to share client eligibility information and to document services delivered to clients. Records are created, accessed and updated by providers via high-speed Internet connections using each client's unique 11-character code. Client demographic information is collected through a registration process that establishes a client's eligibility for Part A services. Examples of information collected at registration include: race, ethnicity, income, mode of transmission, co-morbidities, insurance status, year of diagnoses and more. Service providers enter service encounter information for each client. This information, broken out by service contract and funding source into units, supports billing and other reporting activities.

## **QUESTION 1.1:**

**WHAT ARE THE SOCIODEMOGRAPHIC  
CHARACTERISTICS OF THE GENERAL  
POPULATION IN HOUSTON?**



## **WHAT ARE THE SOCIODEMOGRAPHIC CHARACTERISTICS OF THE GENERAL POPULATION IN HOUSTON?**

This section provides information on the demographic and socioeconomic characteristics of the EMA and HSDA.





### **SUMMARY**

The EMA is comprised of six counties and the HSDA includes these six plus four others. The population center of the region is Harris County, with over 80% of the EMA population and nearly 79% of the HSDA population. Outside Harris County most counties are rural with three EMA counties and two HSDA counties reporting 60% or more rural residents.

The EMA and HSDA are projected to grow at a faster rate than Texas overall, 18% compared to 16% for the state.

-  The fastest growing counties include Montgomery (29%), Fort Bend (27%) and Waller (26%).
-  Age groups with significant projected growth in the EMA and HSDA include 13 to 24, 45 to 64 and 65 and older.

In Harris and Fort Bend Counties, minorities make up the “majority” of residents. White/Anglo are the majority in all other counties.

-  White, non-Hispanics are the largest population group in the EMA and the HSDA, comprising 46% of the EMA’s and HSDA’s populations compared to 52% of the state’s.
-  Hispanics/Latinos make up 30% of the EMA’s and HSDA’s populations and 32% of the state’s.
-  Non-Hispanic Blacks/African-Americans are 17% of the people in the region compared to 11% in Texas.
-  Asians are 5% of the local population and less than 3% of those living in the state.

Twenty percent of EMA and HSDA residents were born outside the U. S. This compares to 14% in the state of Texas. These foreign born residents most frequently come from North, Central and South America. Mexico is the most frequent place of foreign birth, accounting for about half of those born outside the U. S.

Approximately one-third of EMA and HSDA residents are “linguistically isolated,” meaning they speak English less than “very well.” The predominant second language is Spanish.

Within the EMA, the median income is nearly \$47,000 per year which is \$5,000 higher than in the HSDA and \$7,000 higher than is found in the state.

- ✚ Fort Bend County residents have the highest median household income in the HSDA, nearly \$64,000 per year.
- ✚ Montgomery County is second highest with over \$50,000 per year.
- ✚ These two counties also have the highest level of educational attainment.

In 2003, unemployment in the EMA, the HSDA and the state was in the range of 6.8% to 6.9%.

- ✚ Liberty County had the highest 2003 unemployment rate, 10.4%.

Both the EMA and the HSDA have lower rates of poverty than in Texas overall, with 13.9% and 14%, respectively, living in poverty compared to 15.4% for the state.

As a state, Texas ranked first in the U. S. in 1998 according to percent of population uninsured (24.5%) and second in size of the uninsured population (4,880,000). In the HSDA, county populations ranged between one-fifth and one-quarter uninsured.

All of the HSDA counties have full or partial federal designation as medically underserved areas. Six entire counties are designated as medically underserved.

- ✚ Harris County has 18 neighborhoods with medically underserved census tracts. In addition, Harris County has four medically underserved populations. The latter are populations which are medically disadvantaged due to economic, racial or ethnic reasons.

Liberty County has the highest mortality rate of the 10 HSDA counties, ranking thirteenth in the state of Texas. They have the highest infant mortality rate in the state, and are in the top 15 for cancer, lower respiratory diseases and accidents.

- ✚ Fort Bend has the lowest death rate of the ten HSDA counties, ranking 197 in the state.

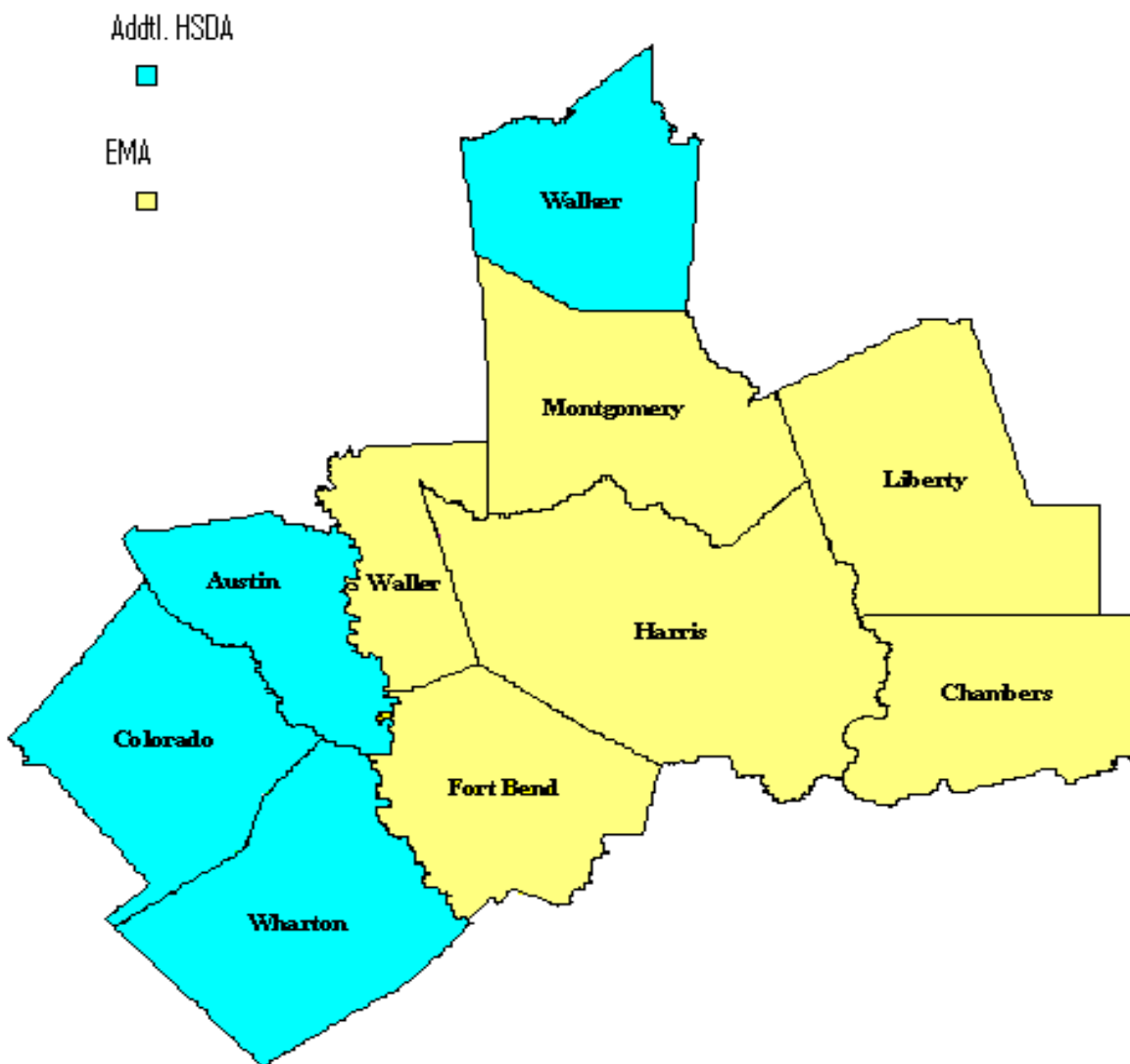
## **THE GEOGRAPHIC REGION**

The Houston area HSDA, referred to in this document, covers 9,415 square miles of southeast Texas and makes up 3.5% of the state's area. It is an area roughly the size of the state of New Hampshire.

Ten counties make up the region, and throughout this document they are grouped by the HIV community planning funding sources. Under the Ryan White Program, the Health Resources Services Administration (HRSA) uses the Eligible Metropolitan Area (EMA) for Ryan White Part A funding, and Health Services Delivery Area (HSDA) for funding under Part B.

- ⚡ The EMA includes six counties: Chambers, Fort Bend, Harris, Liberty, Montgomery and Waller.
- ⚡ The HSDA is composed of these six plus Austin, Colorado, Walker and Wharton. Figure 1.1.1 maps the EMA and identifies the four additional counties that make up the HSDA.

**Figure 1.1.1: Houston EMA/HSDA Area Map**



An Eligible Metropolitan Area (EMA) is an area designated by the Health Resources and Services Administration (HRSA) – a division of the United States Department of Health and Human Services – as eligible to receive Ryan White Program Part A funds. An EMA must have a population of at least 500,000 persons and a total of at least 2,000 cumulative AIDS cases (as reported by the Centers for Disease Control for the most recent 5-year period). The geographic boundaries of EMAs are defined by the U. S.




Census Bureau; some EMAs include just one city, some are composed of several cities and/or counties and others extend over more than one state. The Houston EMA is a 6-County area that consists of Chambers, Fort Bend, Harris, Liberty, Montgomery, and Waller counties in southeast Texas.

The Houston HIV Service Delivery Area (HSDA) is a 10-county area designated by the state to receive Ryan White Part B and DSHS funds. The counties within the HSDA encompass the entire EMA with the addition of Austin, Colorado, Walker and Wharton counties. Part B and DSHS funds are intended to improve the quality, availability and organization of health care and support services for PLWHA (with an emphasis on rural populations) and are administered by the Houston Regional HIV/AIDS Resource Group. In addition to Part B and DSHS funds, the Resource Group administers other local HIV/AIDS funding streams such as Part C (funding to community-based organizations for outpatient early intervention services) and Part D (services for children, youth, women and families).


The Houston HSDA, including the entire EMA, contains more than 4.3 million people across 9,415 square miles (population density = 299.47 people/square mile), with 98% of the population residing in Harris County (population density = 1,630 people/square mile). Harris County is the most populous county in Texas, the third most populous in the nation, and the home of approximately 95% of the HSDA's reported HIV/AIDS cases.

### **URBAN VS. RURAL AND POPULATION DENSITY**

The U. S. Census Bureau identified urban and rural areas within regions. Harris County is home to Houston, the urban center of the region.

-  Over 98% of the Harris County's 3,400,000 residents are considered urban residents.
-  Other counties with large percentages of urban residents include Fort Bend (89.9%), Montgomery (64.0%) and Walker (63.7%).
-  The population of three EMA counties and two HSDA counties have 60% or greater rural residents. These include: Chambers (64.2%), Liberty (64.1%), Waller (63.4%), Austin (62.8%) and Colorado (60.4%). Refer to Table 1.1.1.

Population density considers the number of residents for every square mile of land area.

-  The most rural counties have the lowest population density, and the most urban have the highest. Population density for each county is reflected in Table 1.1.2.

**Table 1.1.1: Houston EMA/HSDA Counties and Total Urban vs. Rural Areas, 2000**

County	Total Population	Urban Population	Rural Population
Chambers	26,031	35.8%	64.2%
Fort Bend	354,452	89.9%	10.1%
Harris	3,400,578	98.2%	1.8%
Liberty	70,154	35.9%	64.1%
Montgomery	293,768	64.0%	36.0%
Waller	32,663	36.6%	63.4%
<b>EMA TOTAL</b>	<b>4,177,646</b>	<b>93.2%</b>	<b>6.8%</b>
Austin	23,590	37.2%	62.8%
Colorado	20,390	39.6%	60.4%
Walker	61,758	63.7%	36.3%
Wharton	41,188	50.3%	49.7%
<b>HSDA TOTAL</b>	<b>4,324,572</b>	<b>91.8%</b>	<b>8.2%</b>
<b>TEXAS TOTAL</b>	<b>20,851,820</b>	<b>82.5%</b>	<b>16.6%</b>

Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004

**Table 1.1.2: Houston EMA/HSDA Counties and Total Population Density, 2000**

County	Population	Land Area in Square Miles	Population Density per Square Mile of Land Area
Chambers	26,031	599.31	43.4
Fort Bend	354,452	874.64	405.3
Harris	3,400,578	1,728.83	1967.0
Liberty	70,154	1,159.68	60.5
Montgomery	293,768	1,044.03	281.4
Waller County	32,663	513.63	63.6
<b>EMA TOTAL</b>	<b>4,177,646</b>	<b>5,920.12</b>	<b>470.2</b>
Austin	23,590	652.59	36.1
Colorado	20,390	962.95	21.2
Walker	61,758	787.45	78.4
Wharton	41,188	1,090.13	37.8
<b>HSDA TOTAL</b>	<b>4,324,572</b>	<b>9,413.24</b>	<b>299.47</b>
<b>TEXAS TOTAL</b>	<b>20,851,820</b>	<b>261,797.12</b>	<b>79.6</b>

Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.



## **POPULATION DISTRIBUTION AND GROWTH**

According to the 2000 U.S. Census report, there are 4,324,572 persons residing in the 10-county HSDA area.

- ✚ This is 20% of the population of Texas in the EMA and 21% in the HSDA.
- ✚ Over 81% of the people living in the EMA live in Harris County and nearly 79% of those in the HSDA live in Harris County.
- ✚ The second largest county is Fort Bend (9%) followed by Montgomery County (7%).
- ✚ The smallest counties by population include Colorado, Austin, and Chambers, each with less than 30,000 residents.

Both the EMA and the HSDA populations are projected to grow approximately 18% between 2000 and 2010. This is faster growth than the 16% that is projected for Texas overall.

- ✚ The fastest growing counties include Montgomery (29%), Fort Bend (27%) and Waller (26%).
- ✚ The slowest growing counties are the four outside the EMA, Colorado (4%), Wharton (6%), Austin (8%) and Walker (10%).
- ✚ The 45 to 64 age group is projecting the greatest growth in the EMA, HSDA and state, between 41% and 45%.
- ✚ This is followed by the 65+ group, but the EMA and HSDA are projected to grow at a faster rate than the state, 37% for the EMA, 35% for the HSDA compared to 22% for Texas.
- ✚ Youth, those 13 to 24 years, are projected to increase 15% in the EMA and 14% in the HSDA compared to 12% for the state.
- ✚ Relatively slow growth, 6.5%, is projected for the 25 to 44 year age group.

**Table 1.1.3: Current and Projected Population Numbers,  
Houston HSDA, 2000 and 2010**

County	Population 2000		Population 2010		Percent Change 2000-2010
	#	%*	#	%*	
Chambers	26,031	0.6%	31,375	0.6%	20.5%
Fort Bend	354,452	8.2%	449,811	8.8%	26.9%
Harris	3,400,578	78.6%	3,951,682	77.6%	16.2%
Liberty	70,154	1.6%	81,930	1.6%	16.8%
Montgomery	293,768	6.8%	379,363	7.5%	29.1%
Waller	32,663	0.8%	41,137	0.8%	25.9%
<b>EMA Total</b>	<b>4,177,646</b>	<b>96.6%</b>	<b>4,935,298</b>	<b>96.9%</b>	<b>18.1%</b>
Austin	23,590	0.6%	25,582	0.5%	8.4%
Colorado	20,390	0.5%	21,101	0.4%	3.5%
Walker	61,758	1.4%	67,664	1.3%	9.6%
Wharton	41,188	1.0%	43,560	0.9%	5.8%
<b>HSDA Total</b>	<b>4,324,572</b>	<b>100.0%</b>	<b>5,093,205</b>	<b>100.0%</b>	<b>17.8%</b>
<b>Texas Total</b>	<b>20,851,820</b>	<b>100.0%</b>	<b>24,178,507</b>	<b>100.0%</b>	<b>16.0%</b>
Source: Texas comptroller's winter 2001-2002 county forecast ( <a href="http://www.window.state.tx.us">www.window.state.tx.us</a> ). Retrieved on March 25, 2004.					
*Reflects percent of total HSDA population					

**Table 1.1.4: Houston EMA/HSDA and Texas Projected Population Change  
by Age, 2000 – 2010**

County	Population 2000		Population 2010		Percent Change 2000-2010
	#	%	#	%	
<b>EMA COUNTIES</b>					
Under 2 years	137,130	3.3%	149,476	3.0%	9.0%
2-12 years	755,031	18.1%	798,633	16.2%	5.8%
13-24 years	744,824	17.8%	857,075	17.4%	15.1%
25-44 years	1,379,256	33.0%	1,468,249	29.7%	6.5%
45-64 years	850,192	20.4%	1,236,403	25.1%	45.4%
65 and older	311,213	7.4%	425,462	8.6%	36.7%
<b>Total</b>	<b>4,177,646</b>	<b>100.0%</b>	<b>4,935,298</b>	<b>100.0%</b>	<b>18.1%</b>
<b>HSDA COUNTIES</b>					
Under 2 years	140,638	3.3%	153,444	3.0%	9.1%
2-12 years	775,471	17.9%	819,610	16.1%	5.7%
13-24 years	777,164	18.0%	889,303	17.5%	14.4%
25-44 years	1,420,468	32.8%	1,512,477	29.7%	6.5%
45-64 years	881,084	20.4%	1,273,478	25.0%	44.5%
65 and older	329,747	7.6%	444,893	8.7%	34.9%
<b>Total</b>	<b>4,324,572</b>	<b>100.0%</b>	<b>5,093,205</b>	<b>100.0%</b>	<b>18.1%</b>
<b>TEXAS</b>					
Under 2 years	652,970	3.1%	730,538	3.0%	11.9%
2-12 years	3,608,917	17.3%	3,868,799	16.0%	7.2%
13-24 years	3,799,040	18.2%	4,256,960	17.6%	12.1%
25-44 years	6,537,409	31.4%	6,915,579	28.6%	5.8%
45-64 years	4,186,017	20.1%	5,892,533	24.4%	40.8%
65 and older	2,067,467	9.9%	2,514,098	10.4%	21.6%
<b>Texas Total</b>	<b>20,851,820</b>	<b>100.0%</b>	<b>24,178,507</b>	<b>100.0%</b>	<b>16.0%</b>
Source: Texas comptroller's winter 2001-2002 county forecast ( <a href="http://www.window.state.tx.us">www.window.state.tx.us</a> ). Retrieved on March 25, 2004.					

## RACE/ETHNICITY

While the EMA and the HSDA have similar racial and ethnic make ups, they differ from Texas overall.

- White, non-Latinos are the largest population group in the HSDA, comprising 46% of overall HSDA population.
- Latinos/Latinas are a somewhat smaller percentage in the EMA and HSDA than the state, 30% in the region and 32% in the state.
- Non-Latino Black/African-Americans are a larger percentage of the population in the EMA and HSDA than in the state, making up over 17% of the people in the region compared to 11% in Texas.
- Larger percentages of Asians also live in the EMA and HSDA than in the state overall. Asians are 5% of the regional population and less than 3% of those living in the state.

In Harris and Fort Bend Counties, minorities make up the “majority” of residents. White/Anglo are the majority in all other counties.

- By county, Harris County has the most racially and ethnically diverse population with 33% Latino/Latino, 18% Black/African-American and 5% Asian.
- The counties with the largest percentages of Black/African-American residents are Waller (29%), Walker (24%), and Fort Bend (20%).
- The counties with the largest percentage of Latino residents are Harris (33%), Wharton (31%) and Fort Bend (21%).
- Fort Bend County has the largest percentage of Asian residents with over 11%.
- In the EMA and HSDA, women make up a larger percentage of the Black/African-American population than men, and men are a larger percentage of the Latino population than women.
- Of the Latino population, the largest percentage is of Mexican heritage. Mexicans comprise 24% of Harris County residents and 22% of Wharton County residents.
- Twenty percent of EMA and HSDA residents were born outside the U.S. This compares to 14% in the state of Texas. In both the region and the state, these foreign born residents most frequently come from North, Central and South America. Mexico is the most frequent place of foreign birth, accounting for about half of those born outside the U.S.
- Approximately 4% of the EMA and HSDA populations were born in Asia.

**Table 1.1.5: Houston EMA/HSDA Counties and Total Population by Race and Ethnicity, 2000**

County	Total Pop	White, Non-Hispanic	Black/ African-American, Non-Hispanic	Hispanic/Latino	Asian, Non-Hispanic	Other, Non-Hispanic
	N	%	%	%	%	%
Chambers	26,031	77.6%	9.7%	10.8%	0.7%	1.2%
Fort Bend	354,355	46.2%	19.6%	21.1%	11.2%	1.9%
Harris	3,399,186	42.1%	18.2%	32.9%	5.1%	1.6%
Liberty	70,136	74.6%	12.8%	10.9%	0.3%	1.5%
Montgomery	293,688	81.4%	3.4%	12.6%	1.1%	1.4%
Waller	32,660	49.9%	29.1%	19.4%	0.4%	1.3%
<b>EMA TOTAL</b>	<b>4,176,056</b>	<b>46.1%</b>	<b>17.2%</b>	<b>29.9%</b>	<b>5.2%</b>	<b>1.6%</b>
Austin	23,589	71.9%	10.5%	16.1%	0.3%	1.2%
Colorado	20,387	64.6%	14.5%	19.7%	0.2%	1.0%
Walker	61,733	60.1%	23.8%	14.1%	0.8%	1.3%
Wharton	41,170	53.0%	14.7%	31.3%	0.3%	0.7%
<b>HSDA TOTAL</b>	<b>4,322,935</b>	<b>46.6%</b>	<b>17.3%</b>	<b>29.6%</b>	<b>5.0%</b>	<b>1.6%</b>
<b>TEXAS TOTAL</b>	<b>20,851,820</b>	<b>52.4%</b>	<b>11.3%</b>	<b>32.0%</b>	<b>2.7%</b>	<b>1.6%</b>

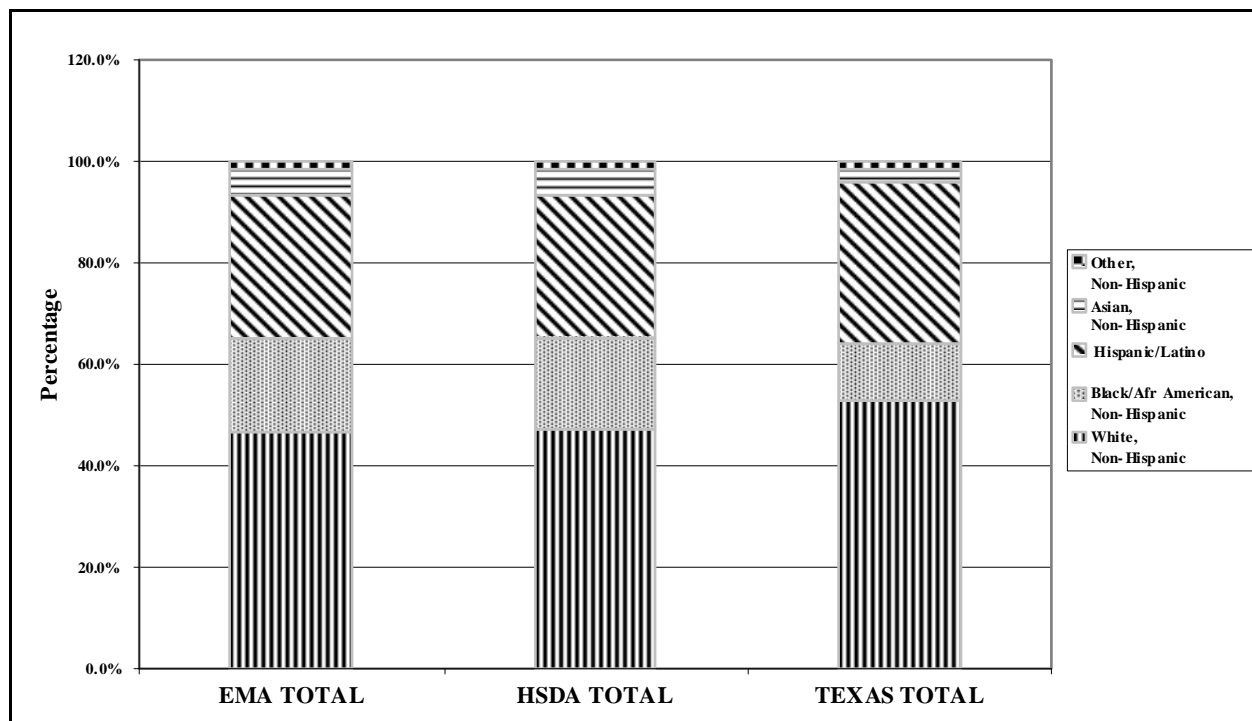
Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.  
Percentage calculations are based on the total population of each gender

**Table 1.1.6 Houston EMA/HSDA Total Population by Race, Ethnicity and Gender, 2000**

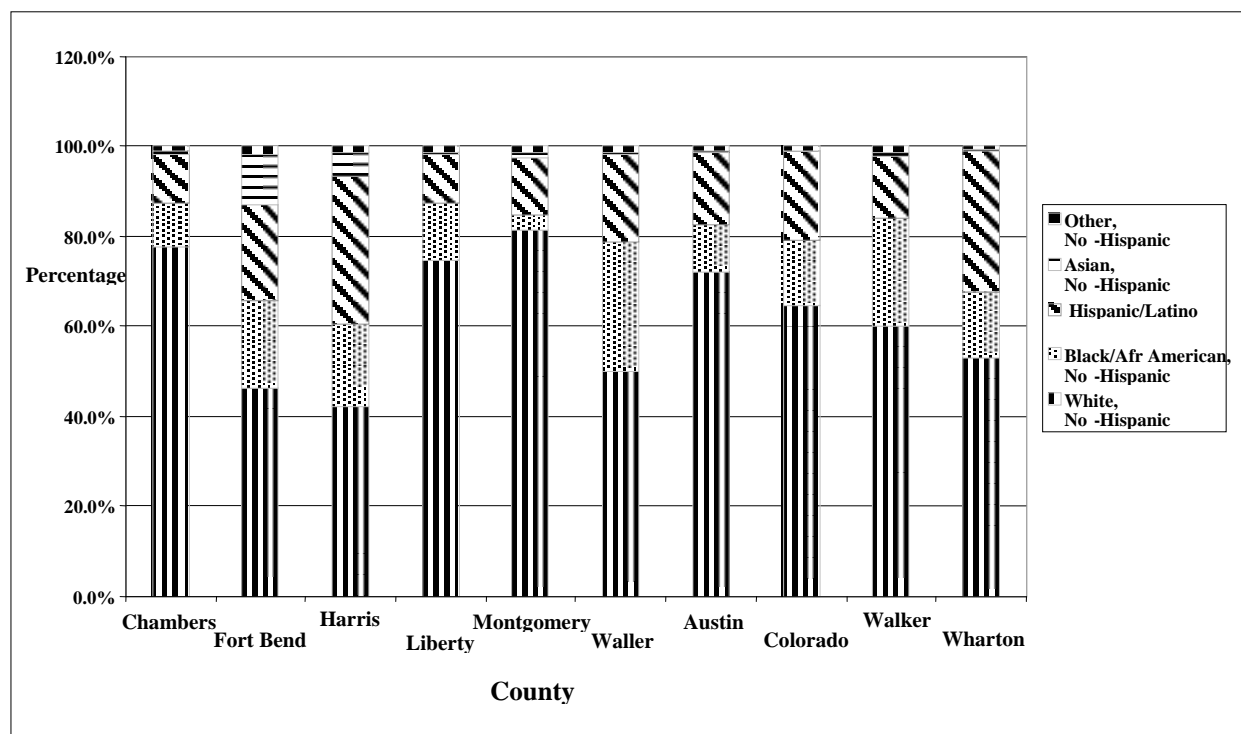
County	Total Pop	White, Non-Hispanic	Black/ African-American, Non-Hispanic	Hispanic/Latino	Asian, Non-Hispanic	Other, Non-Hispanic
	N	%	%	%	%	%
<b>EMA-female</b>	2,098,020	46.5%	18.3%	28.5%	5.2%	1.6%
<b>EMA-male</b>	2,079,626	45.6%	16.2%	31.3%	5.2%	1.7%
<b>HSDA-female</b>	2,165,988	47.0%	18.2%	28.2%	5.0%	1.6%
<b>HSDA-male</b>	2,158,584	46.1%	16.3%	31.0%	5.0%	1.7%

Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.  
Percentage calculations are based on the total population of each gender

**Figure 1.1.2: Houston EMA/HSDA and Texas Total Population by Race and Ethnicity, 2000**



**Figure 1.1.3: Houston EMA/HSDA Counties Population by Race and Ethnicity, 2000**

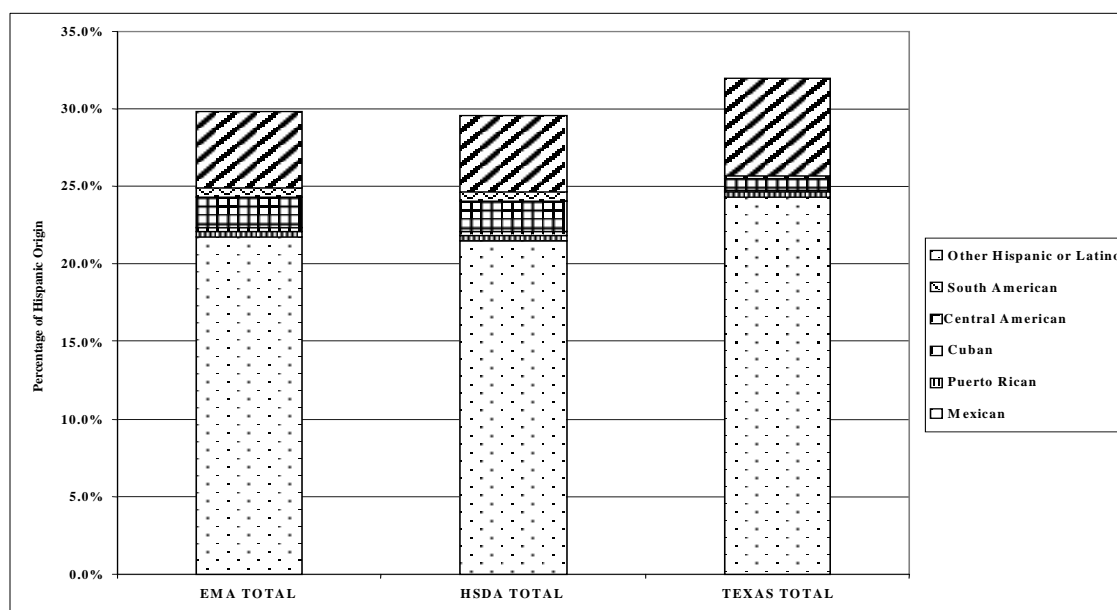


**Table 1.1.7: Houston EMA/HSDA Counties and Total Hispanic/Latino by Country of Origin, 2000**

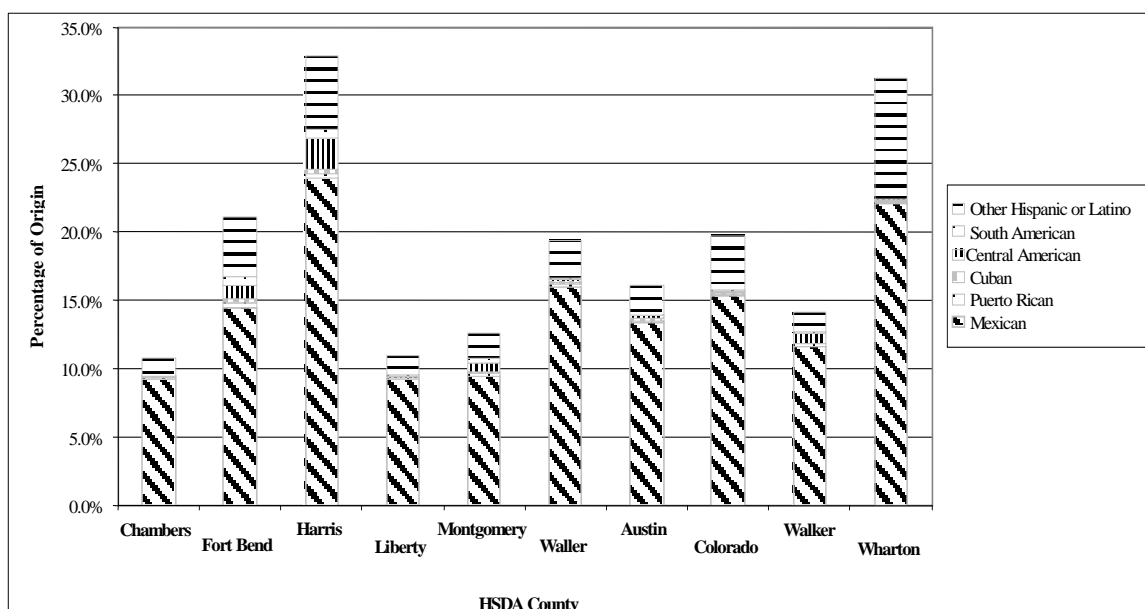
County	Total Pop	Hispanic or Latino	Mexican	Puerto Rican	Cuban	Central American	South American	Other Hispanic or Latino
Chambers	26,031	10.8%	9.2%	0.1%	0.1%	0.1%	0.0%	1.3%
Fort Bend	354,452	21.1%	14.5%	0.3%	0.3%	1.0%	0.7%	4.3%
Harris	3,400,578	32.9%	24.0%	0.4%	0.2%	2.3%	0.7%	5.3%
Liberty	70,154	10.9%	9.2%	0.1%	0.0%	0.1%	0.0%	1.4%
Montgomery	293,768	12.6%	9.5%	0.2%	0.1%	0.7%	0.3%	1.9%
Waller	32,663	19.4%	16.0%	0.2%	0.1%	0.2%	0.1%	2.8%
<b>EMA TOTAL</b>	<b>4,177,646</b>	<b>29.9%</b>	<b>21.7%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>2.0%</b>	<b>0.6%</b>	<b>4.9%</b>
Austin	23,590	16.1%	13.4%	0.1%	0.2%	0.2%	0.1%	2.2%
Colorado	20,390	19.7%	15.4%	0.1%	0.2%	0.1%	0.1%	4.0%
Walker	61,758	14.1%	11.7%	0.1%	0.0%	0.8%	0.1%	1.4%
Wharton	41,188	31.3%	22.1%	0.1%	0.1%	0.1%	0.0%	8.9%
<b>HSDA TOTAL</b>	<b>4,324,572</b>	<b>29.6%</b>	<b>21.5%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>2.0%</b>	<b>0.6%</b>	<b>4.9%</b>
<b>TEXAS TOTAL</b>	<b>20,851,820</b>	<b>32.0%</b>	<b>24.3%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>0.7%</b>	<b>0.2%</b>	<b>6.2%</b>

Source: U. S. Census Bureau, 2000 ([www.census.gov](http://www.census.gov)). Retrieved on March 25, 2004.  
Percentage calculations are based on the total population of each gender

**Figure 1.1.4: Houston EMA/HSDA and Texas Hispanic/Latino by Country of Origin, 2000**



**Figure 1.1.5: Houston EMA/HSDA Counties Hispanic/Latino by Country of Origin, 2000**



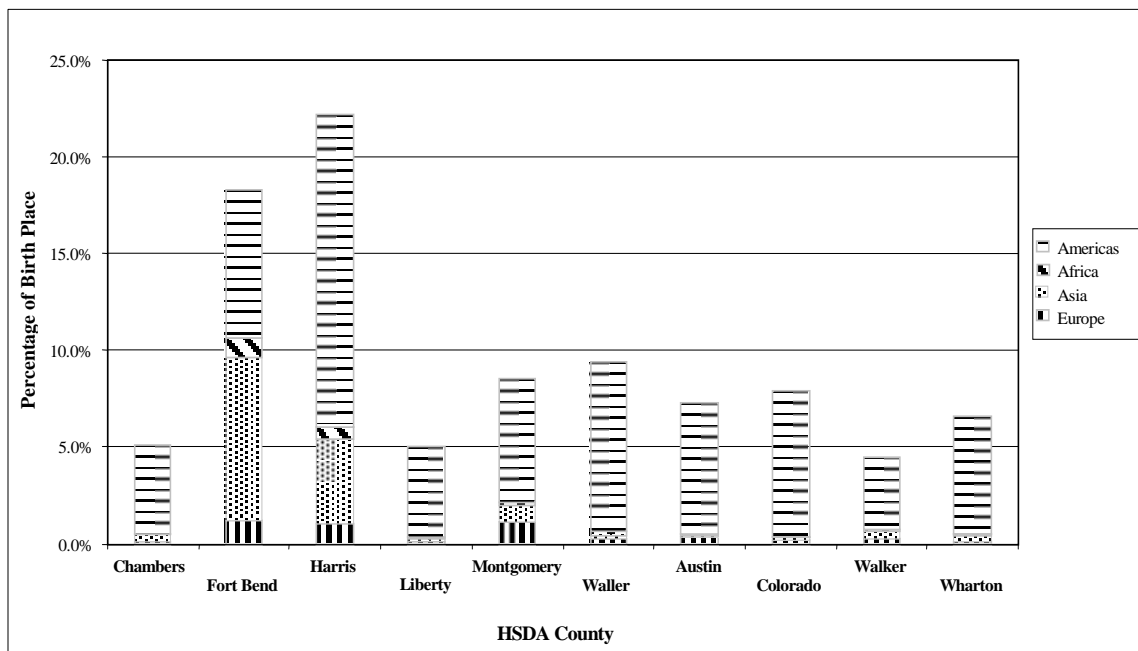
**Table 1.1.8: Houston EMA/HSDA Counties and Total Foreign Born by Place of Birth, 2000**

County	Total Population	Total Foreign Born	Birth Place for Foreign Born				
			Europe	Asia	Africa	Americas	Mexico
Chambers	26,031	5.1%	0.1%	0.3%	0.0%	4.6%	4.4%
Fort Bend	354,452	18.3%	1.2%	8.4%	1.0%	7.6%	4.5%
Harris	3,400,578	22.2%	1.1%	4.3%	0.7%	16.1%	11.6%
Liberty	70,154	5.1%	0.1%	0.2%	0.1%	4.7%	4.3%
Montgomery	293,768	8.6%	1.1%	0.9%	0.2%	6.4%	4.7%
Waller	32,663	9.4%	0.3%	0.2%	0.2%	8.8%	8.0%
<b>EMA TOTAL</b>	<b>4,177,646</b>	<b>20.5%</b>	<b>1.1%</b>	<b>4.3%</b>	<b>0.6%</b>	<b>14.4%</b>	<b>10.3%</b>
Austin	23,590	7.3%	0.3%	0.1%	0.0%	6.8%	6.1%
Colorado	20,390	7.9%	0.2%	0.2%	0.0%	7.5%	7.1%
Walker	61,758	4.5%	0.2%	0.4%	0.1%	3.7%	2.8%
Wharton	41,188	6.6%	0.1%	0.3%	0.1%	6.1%	5.7%
<b>HSDA TOTAL</b>	<b>4,324,572</b>	<b>20.0%</b>	<b>1.0%</b>	<b>4.2%</b>	<b>0.6%</b>	<b>14.1%</b>	<b>10.2%</b>
<b>TEXAS TOTAL</b>	<b>20,851,820</b>	<b>13.9%</b>	<b>3.5%</b>	<b>10.8%</b>	<b>1.5%</b>		

Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.  
Percentage calculations are based on the total population of each gender



**Figure 1.1.6: Houston EMA/HSDA Counties Foreign Born by Place of Birth, 2000**



### Linguistic Isolation

Approximately one-third of EMA and HSDA residents are “linguistically isolated,” meaning they speak English less than “very well.”

- More than one-third of the people living in Harris County and 30% of the people living in Fort Bend speak English less than “very well.”
- The largest percentages of linguistically isolated people are Spanish speaking.
- More than one quarter of those who speak Indo-European languages (i.e., Spanish, Italian, Portuguese, Russian, German, Bengali, etc) are linguistically isolated.
- Very few of those speaking Asian and Pacific Islander languages report being linguistically isolated.

**Table 1.1.9: Houston EMA/HSDA Counties  
and Total Linguistic Isolation, 2000**

County	Total 5+ Pop	English Only Pop	Speak other than English						
			Total Pop	Spanish		Indo-European		Speak Asian & Pacific Island	
				Total Pop	LI	Total Pop	LI	Total Pop	LI
Chambers	24,205	88.3%	2,834	2,265	43.9%	460	29.1%	87	8.0%
Fort Bend	327,666	69.3%	100,596	57,612	40.0%	16,603	24.8%	22,409	4.4%
Harris	3,121,999	63.8%	1,129,856	898,885	52.9%	87,470	28.2%	116,285	4.5%
Liberty	65,425	87.7%	8,030	7,042	44.4%	733	13.4%	129	0.0%
Montgomery	271,298	86.2%	37,552	31,077	49.4%	4,258	18.3%	1,854	6.0%
Waller	30,397	81.9%	5,513	4,994	52.9%	364	25.0%	74	13.5%
<b>EMA TOTAL</b>	<b>3,840,990</b>	<b>66.6%</b>	<b>1,284,381</b>	<b>1,001,875</b>	<b>52.0%</b>	<b>109,888</b>	<b>27.2%</b>	<b>140,838</b>	<b>4.5%</b>
Austin	22,056	82.9%	3,770	2,967	46.6%	795	29.1%	87	8.0%
Colorado	19,150	80.1%	3,818	3,130	49.1%	626	26.0%	24	54.2%
Walker	58,854	85.7%	8,390	7,586	44.4%	455	18.2%	285	1.1%
Wharton	38,401	73.3%	10,239	9,145	35.7%	989	19.3%	74	5.4%
<b>HSDA TOTAL</b>	<b>3,979,451</b>	<b>67.1%</b>	<b>1,310,598</b>	<b>1,024,703</b>	<b>51.8%</b>	<b>112,753</b>	<b>27.1%</b>	<b>141,308</b>	<b>4.5%</b>
<b>TEXAS TOTAL</b>	<b>19,241,518</b>	<b>68.8%</b>	<b>6,010,753</b>	<b>5,195,182</b>	<b>45.6%</b>	<b>358,019</b>	<b>25.8%</b>	<b>374,330</b>	<b>4.6%</b>

Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.  
 Linguistic Isolation = speaks English less than "very well."  
 Total Pop reflects all speaking that language.  
 LI = Percentage of those speaking the language who are linguistically isolated/speak English less than "very well."

## SOCIOECONOMIC STATUS

Median household income helps explain how much money people in the region earn. Since it is for "household", it is the combined amount of money earned by everyone living in a household. The "median income" means that half the people living in the region/county earn less than that amount and half earn more. While the higher median income is better for the region, it has to be considered against the cost of living in an area and the number of people in each household. Typically, the cost of living in urban areas is higher than in rural areas.

People living in the EMA and HSDA have higher median household incomes than people throughout the entire state of Texas. Within the EMA, the median income is nearly \$47,000 per year which is \$5,000 higher than in the HSDA and \$7,000 higher than is found in the state.

- ✂ Fort Bend County residents have the highest median household income of all the counties in the HSDA with nearly \$64,000 per year.

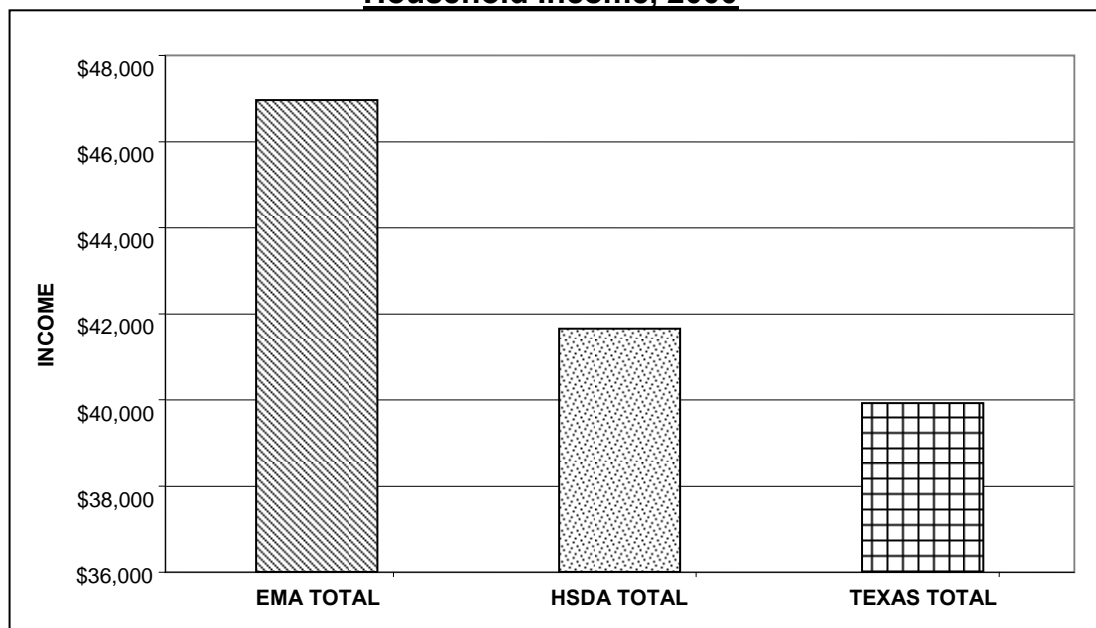
- ✚ The area with the second highest median income is Montgomery County with over \$50,000 per year.
- ✚ Counties with the lowest median household income are three of the four HSDA counties outside the EMA: Colorado, Wharton and Walker. Refer to Table 1.1.10 and Figure 1.1.7.

**Table 1.1.10: Houston EMA/HSDA Counties and Total Median Household Income, 2000**

County	Median Household Income
Chambers	\$47,964
Fort Bend	\$63,831
Harris	\$42,598
Liberty	\$38,361
Montgomery	\$50,864
Waller	\$38,136
<b>EMA TOTAL</b>	<b>\$46,959</b>
Austin	\$38,615
Colorado	\$32,425
Walker	\$31,468
Wharton	\$32,208
<b>HSDA TOTAL</b>	<b>\$41,647</b>
<b>TEXAS TOTAL</b>	<b>\$39,927</b>

Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.

**Figure 1.1.7: Houston EMA/HSDA and Texas Total Median Household Income, 2000**



## **OWNER COST AND GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME**

The U. S. Census Bureau tracks the percentage of household income that is spent on housing. For people that own their homes, owner cost includes all expenses required to own a home such as mortgage payments, real estate taxes, homeowners' insurance, utilities, condominium and association fees, etc. For people that rent their home or apartment, this includes rent, utilities and other associated costs. These costs are reported as a percentage of household income. Unfortunately, the same percentages are not used for owner cost and renter cost, so direct comparisons are not possible. (Table 1.1.11 and Table 1.1.12)

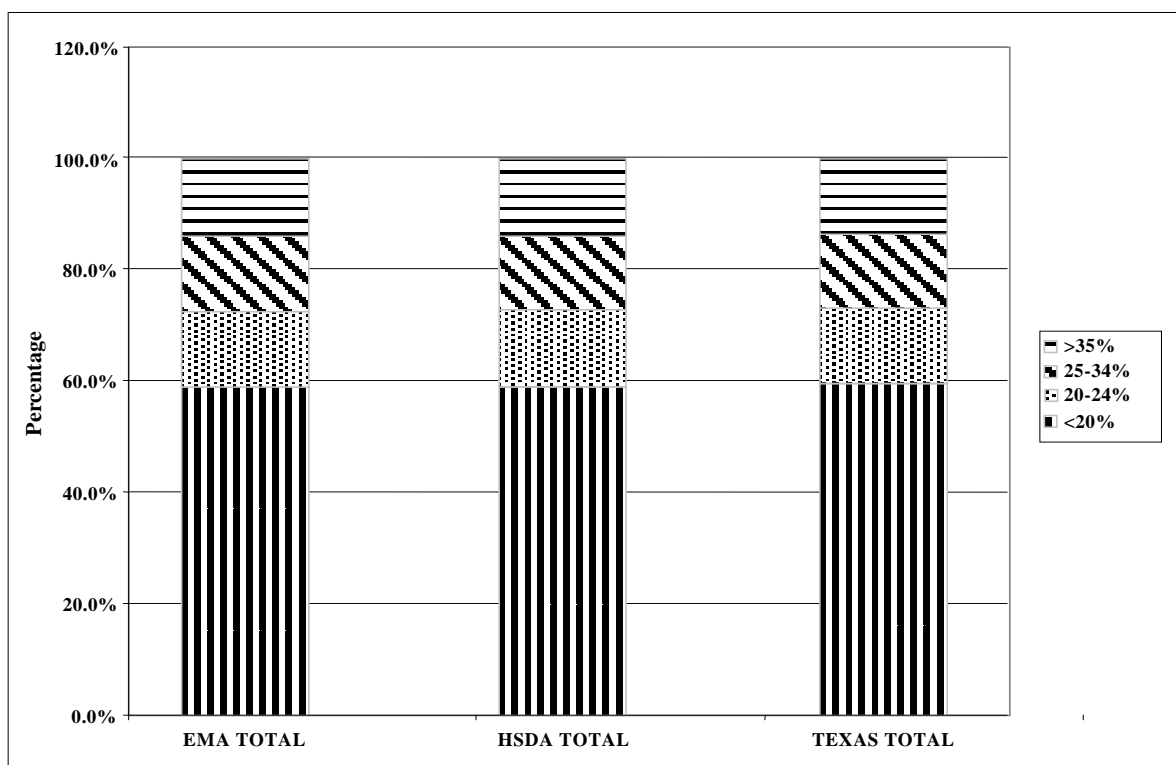
- ✚ Considering owner cost, five HSDA counties have approximately two-thirds of residents whose owner cost is less than 20% of household income. These are generally rural counties.
- ✚ The counties with the most residents with owner costs more than 20% of household income are the most urban counties, including Fort Bend (54.1%), Harris (59.1%) and Montgomery (60.3%).
- ✚ Waller County has the highest percentage with owner cost greater than 35% of income (17.1%). This is followed by Fort Bend County (14.3%) and Harris County (14.3%). Refer to Table 1.1.11
- ✚ Chambers, Liberty and Austin Counties have the lowest renter costs, including the largest percentages of their populations with renter costs below 15% of income.
- ✚ Walker County has the highest renter cost, with 42% of the population spending 35% or more of their incomes on rent. This is followed by Waller County with 29% of their residents at that level. Harris, Liberty and Montgomery all have approximately 27% of their residents dedicating 35% or more of their incomes to rent. (Table 1.1.12)

**Table 1.1.11: Houston EMA/HSDA Counties Owner Cost as Percentage of Household Income, 2000**

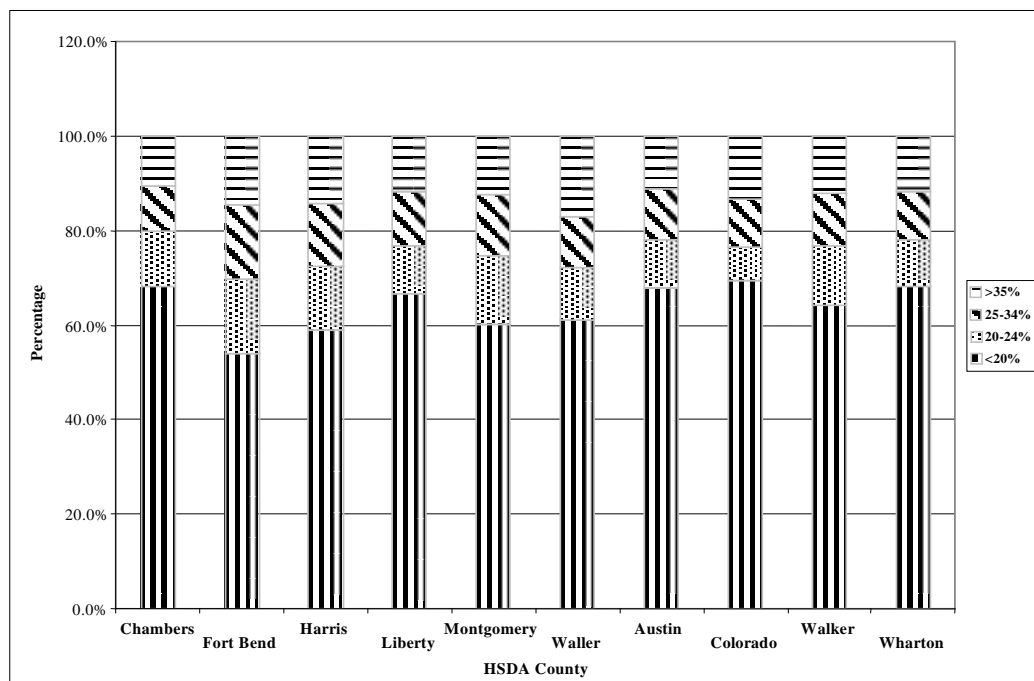
County	Total N <sup>1</sup>	<20% %	20-24% %	25-34% %	>35% %
Chambers	5,320	68.1%	11.7%	9.4%	10.7%
Fort Bend	81,296	54.1%	15.6%	15.6%	14.7%
Harris	592,221	59.1%	13.4%	13.2%	14.3%
Liberty	10,097	66.5%	10.4%	11.3%	11.8%
Montgomery	59,089	60.3%	14.3%	12.8%	12.5%
Waller	4,125	61.0%	11.2%	10.7%	17.1%
<b>EMA TOTAL</b>	<b>752,148</b>	<b>58.8%</b>	<b>13.7%</b>	<b>13.4%</b>	<b>14.1%</b>
Austin	3,956	68.0%	10.0%	10.9%	11.1%
Colorado	3,742	69.6%	6.9%	10.1%	13.4%
Walker	6,165	64.2%	12.5%	11.3%	12.0%
Wharton	7,592	68.2%	9.9%	10.2%	11.7%
<b>HSDA TOTAL</b>	<b>773,603</b>	<b>59.0%</b>	<b>13.6%</b>	<b>13.3%</b>	<b>14.1%</b>
<b>TEXAS TOTAL</b>	<b>3,809,005</b>	<b>59.6%</b>	<b>13.4%</b>	<b>13.3%</b>	<b>13.7%</b>

Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.  
 Note <sup>1</sup>: Includes only households that monthly cost was computed.

**Figure 1.1.8: Houston EMA/HSDA and Texas Owner Cost as Percentage of Household Income, 2000**



**Figure 1.1.9: Houston EMA/HSDA Counties Owner Cost as Percentage of Household Income, 2000**

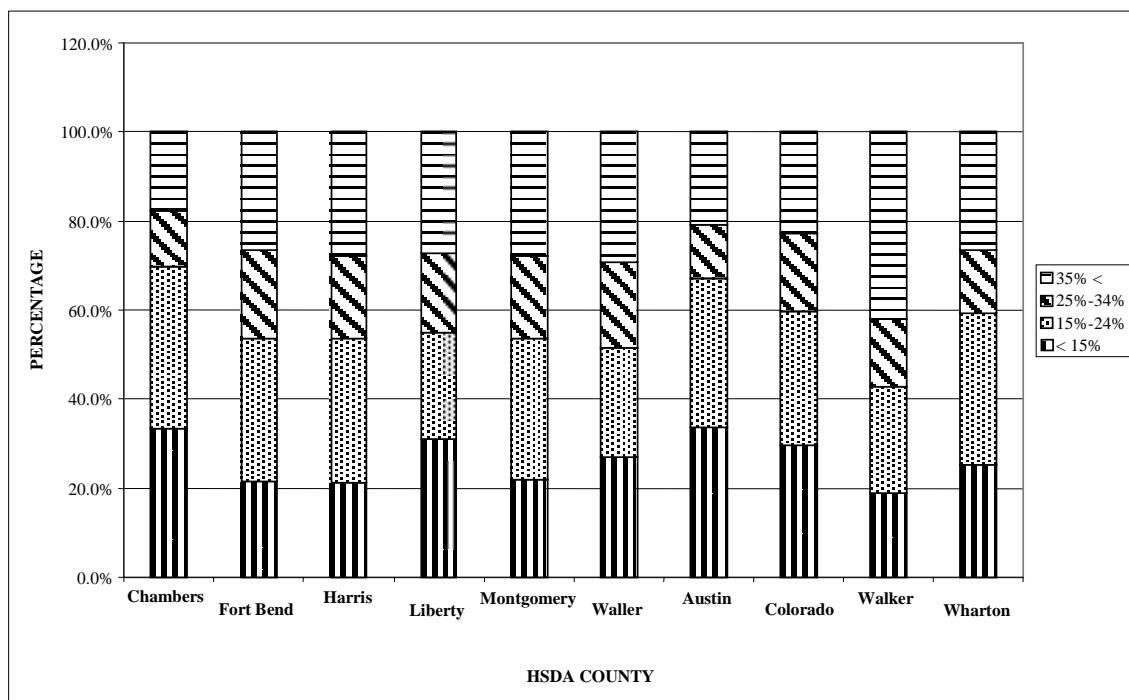


**Table 1.1.12: Houston EMA/HSDA Counties Gross Rent as a Percentage of Household Income, 2000**

County	Total households *	< 15%	15%-24%	25%-34%	>35%
Chambers	1,238	33.5%	36.3%	12.4%	17.7%
Fort Bend	19,652	21.8%	31.9%	19.8%	26.5%
Harris	507,029	21.3%	32.3%	18.6%	27.8%
Liberty	4,136	31.1%	23.8%	17.8%	27.2%
Montgomery	20,397	22.1%	31.6%	18.6%	27.7%
Waller	2,341	27.0%	24.5%	19.2%	29.3%
<b>EMA TOTAL</b>	<b>554,793</b>	<b>21.5%</b>	<b>32.1%</b>	<b>18.7%</b>	<b>27.7%</b>
Austin	1,581	33.6%	33.5%	12.0%	20.8%
Colorado	1,305	29.6%	30.2%	17.2%	23.0%
Walker	6,423	18.9%	23.9%	15.3%	41.9%
Wharton	3,769	25.4%	33.9%	14.3%	26.4%
<b>HSDA TOTAL</b>	<b>567,871</b>	<b>21.5%</b>	<b>32.1%</b>	<b>18.6%</b>	<b>27.8%</b>

Note\*: Total households of which rental statistics are calculated. Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.

**Figure 1.1.10: Houston EMA/HSDA Counties Gross Rent as Percentage of Household Income**



## EMPLOYMENT STATUS

In 2009, the unemployment percentage for Texas was 7.63%. In the EMA, the unemployment was 7.5% and in the four additional HSDA counties it was 7.10%.

- Liberty County had the highest unemployment rate at 10.1%.
- Colorado (6.5%), Walker (7.0%) and Waller (7.0%) had the lowest unemployment rates.

**Table 1.1.13: Houston EMA/HSDA Counties Employment Status of Residents Over 16 Years of Age, 2003**

<b>County</b>	<b>Labor Force Population</b>	<b>Unemployed</b>	<b>Unemployed %</b>
Chambers	14,771	1,385	9.4%
Fort Bend	272,021	19,706	7.2%
Harris	1,982,288	150,347	7.6%
Liberty	32,089	3,228	10.1%
Montgomery	217,384	15,157	7.0%
Waller	16,636	1,368	8.2%
<b>EMA TOTAL</b>	<b>2,535,189</b>	<b>191,191</b>	<b>7.5%</b>
Austin	13,382	985	7.4%
Colorado	10,832	700	6.5%
Walker	27,935	1,962	7.0%
Wharton	21,376	1,507	7.05%
<b>HSDA TOTAL</b>	<b>73,525</b>	<b>5,154</b>	<b>7.01%</b>
<b>TEXAS TOTAL</b>	<b>11,930,847</b>	<b>910,621</b>	<b>7.63%</b>
Source: Texas Workforce Commission's Labor Market Information Department ( <a href="http://www.tracer2.com">www.tracer2.com</a> ). Retrieved on 01/27/11. Unemployed % is based on the number of in labor force.			

## EDUCATIONAL ATTAINMENT

Educational attainment reflects each person in an area's highest grade in school. The EMA, HSDA and state are similar with 11% going through eighth grade or less, 13% going to high school, but not graduating, approximately half graduating from high school and possibly attending some college, and roughly one quarter receiving a bachelor's degree in college or higher.

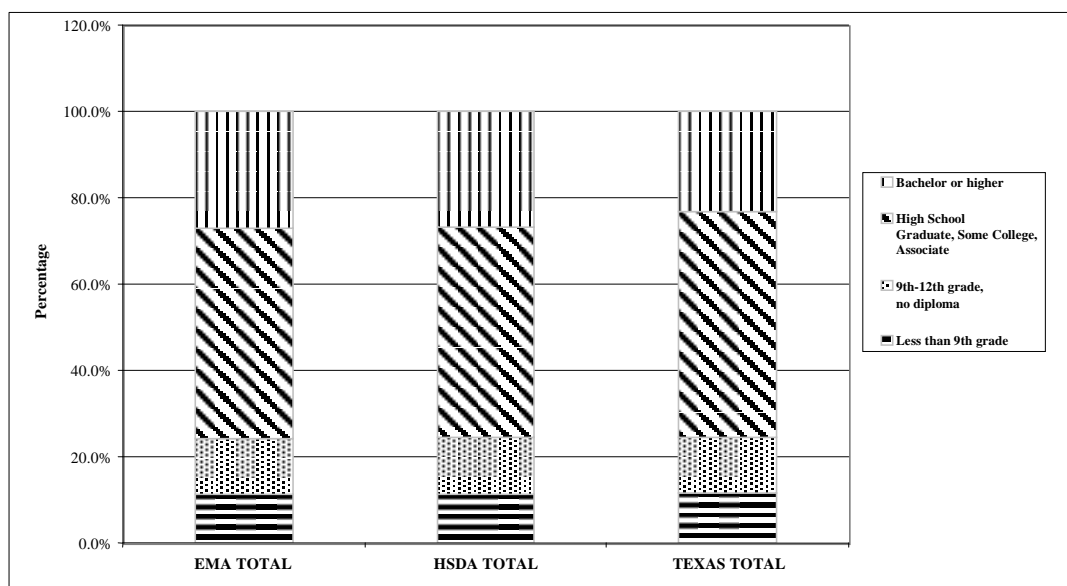


- Counties with the highest percentage getting their high school diploma or more include: Fort Bend (84.3%), Montgomery (81.6%), Chambers (77.0%), Harris (74.6%), and Waller (73.9%).
- Counties with the highest percentage of residents who did not go beyond eighth grade include: Colorado, Wharton, Austin and Harris.

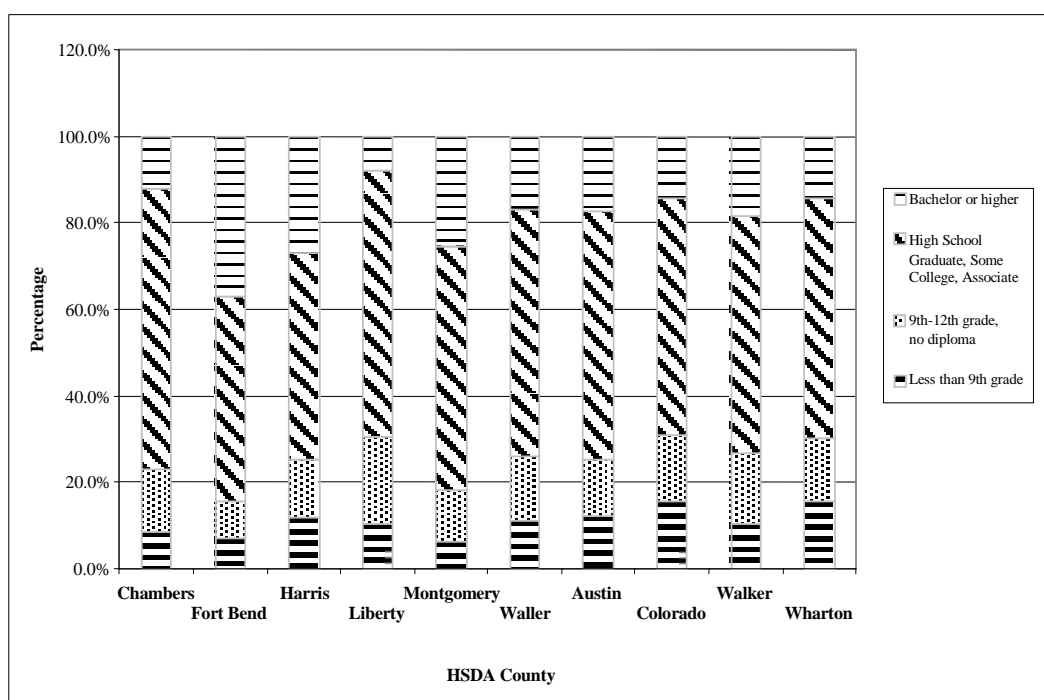
**Table 1.1.14: Houston EMA/HSDA Counties Educational Attainment, 2000**

County	Total Pop >25	Less than 9th grade	9th-12th grade, no diploma	High School Graduate, Some College, Associate	Bachelor or higher
Chambers	16,348	8.5%	14.5%	64.9%	12.1%
Fort Bend	214,461	7.2%	8.5%	47.4%	36.9%
Harris	2,067,399	12.1%	13.3%	47.7%	26.9%
Liberty	44,206	10.5%	19.9%	61.5%	8.1%
Montgomery	183,743	6.3%	12.1%	56.3%	25.3%
Waller	18,395	11.1%	15.1%	57.1%	16.8%
<b>EMA TOTAL</b>	<b>2,544,552</b>	<b>11.2%</b>	<b>12.9%</b>	<b>48.7%</b>	<b>27.2%</b>
Austin	15,280	12.2%	13.2%	57.2%	17.3%
Colorado	13,383	15.6%	15.3%	54.6%	14.4%
Walker	36,678	10.4%	16.6%	54.7%	18.3%
Wharton	25,567	15.5%	14.7%	55.4%	14.3%
<b>HSDA TOTAL</b>	<b>2,635,460</b>	<b>11.3%</b>	<b>13.0%</b>	<b>48.9%</b>	<b>26.8%</b>
<b>TEXAS TOTAL</b>	<b>12,790,893</b>	<b>11.5%</b>	<b>12.9%</b>	<b>52.4%</b>	<b>23.2%</b>
Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.					
Note <sup>1</sup> is based on 25+ total population.					

**Figure 1.1.11: Houston EMA/HSDA and Texas Educational Attainment, 2000**



**Figure 1.1.12: Houston EMA/HSDA Counties Educational Attainment, 2000**



## POVERTY STATUS

Both the EMA and the HSDA have lower rates of poverty than in Texas overall, with 13.9% and 14%, respectively, living in poverty compared to 15.4% for the state. Both the local and statewide percentages are larger than the 12.4% nationally who are living in poverty.

- ✂ Counties with the highest levels of poverty include Walker, Colorado and Wharton which are three of the four counties that are only part of the HSDA, and Waller and Harris in the EMA.
- ✂ Blacks/African-Americans in the EMA and HSDA make up a higher percentage of those living in poverty than is found throughout the state. Whites/Anglos and Hispanics/Latinos in the EMA and HSDA represent smaller percentages of those living in poverty when compared with the state overall. (Table 1.1.15)
- ✂ Children and others under 25 years of age are a large percentage of those living in poverty throughout the EMA, HSDA and state. (Table 1.1.16)
- ✂ Families with single females as head of household comprise a large percentage of families in poverty. (Table 1.1.17)

**Table 1.1.15: Houston EMA/HSDA Counties Poverty Level by Race, 2000**

County	Total	Population for whom poverty status is determined: below poverty level		White	Black	Other*	Hispanic*
	N	N	%	%*	%*	%*	%*
Chambers	25,719	2,833	11.0%	6.5%	2.5%	2.1%	2.6%
Fort Bend	349,010	24,953	7.1%	2.9%	1.7%	2.6%	3.3%
Harris	3,360,536	503,234	15.0%	6.0%	4.2%	4.8%	7.5%
Liberty	64,878	9,296	14.3%	9.5%	3.0%	1.8%	2.8%
Montgomery	291,519	27,376	9.4%	7.0%	0.9%	1.5%	2.4%
Waller	29,487	4,718	16.0%	6.0%	6.5%	3.5%	5.4%
<b>EMA TOTAL</b>	<b>4,121,149</b>	<b>572,410</b>	<b>13.9%</b>	<b>5.9%</b>	<b>3.7%</b>	<b>4.3%</b>	<b>6.7%</b>
Austin	23,345	2,814	12.1%	6.5%	2.6%	3.0%	4.7%
Colorado	19,543	3,171	16.2%	8.0%	4.9%	3.3%	5.0%
Walker	44,904	8,253	18.4%	10.6%	6.1%	1.6%	2.6%
Wharton	40,519	6,703	16.5%	8.1%	4.4%	4.0%	7.9%
<b>HSDA TOTAL</b>	<b>4,249,460</b>	<b>593,351</b>	<b>14.0%</b>	<b>6.0%</b>	<b>3.8%</b>	<b>4.2%</b>	<b>6.6%</b>
<b>TEXAS TOTAL</b>	<b>20,287,300</b>	<b>3,117,609</b>	<b>15.4%</b>	<b>8.9%</b>	<b>2.6%</b>	<b>3.9%</b>	<b>8.2%</b>

Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.

\* Hispanic and other races are not mutually exclusive.

\*\*\* All the percentages are based on total population of whom population status is determined.

**Table 1.1.16: Houston EMA/HSDA Counties Poverty by Age and Gender, 2000**

Male							
County	Total Population	Income below poverty level		<25	25-44	45-64	65 ≤
	N	N	%	%	%	%	%
Chambers	25,719	1,213	4.7%	2.5%	0.8%	1.0%	0.3%
Fort Bend	349,010	11,438	3.3%	1.8%	0.8%	0.5%	0.2%
Harris	3,360,536	233,388	6.9%	3.9%	1.9%	0.8%	0.3%
Liberty	64,878	3,991	6.2%	3.5%	1.3%	1.0%	0.4%
Montgomery	291,519	12,091	4.1%	2.2%	1.1%	0.6%	0.3%
Waller	29,487	2,391	8.1%	4.6%	2.0%	1.2%	0.3%
<b>EMA TOTAL</b>	<b>4,121,149</b>	<b>264,512</b>	<b>6.4%</b>	<b>3.6%</b>	<b>1.8%</b>	<b>0.8%</b>	<b>0.3%</b>
Austin	23,345	1,200	5.1%	2.5%	1.1%	1.0%	0.5%
Colorado	19,543	1,285	6.6%	3.4%	1.3%	1.0%	0.8%
Walker	44,904	3,672	8.2%	5.7%	1.3%	0.8%	0.5%
Wharton	40,519	3,024	7.5%	3.7%	1.6%	1.5%	0.7%
<b>HSDA TOTAL</b>	<b>4,249,460</b>	<b>273,693</b>	<b>6.4%</b>	<b>3.6%</b>	<b>1.8%</b>	<b>0.8%</b>	<b>0.3%</b>
<b>TEXAS POPULATION</b>	<b>20,287,300</b>	<b>1,406,608</b>	<b>6.9%</b>	<b>4.0%</b>	<b>1.7%</b>	<b>0.9%</b>	<b>0.4%</b>
Female							
County	Total Population	Income below poverty level		<25	25-44	45-64	65 ≤
	N	N	%	%	%	%	%
Chambers	25,719	1,620	6.3%	2.5%	1.7%	1.3%	0.7%
Fort Bend	349,010	13,515	3.9%	1.8%	1.2%	0.6%	0.4%
Harris	3,360,536	269,846	8.0%	4.0%	2.5%	1.0%	0.6%
Liberty	64,878	5,305	8.2%	3.4%	2.3%	1.2%	1.2%
Montgomery	291,519	15,285	5.2%	2.3%	1.5%	0.9%	0.6%
Waller	29,487	2,327	7.9%	3.7%	2.3%	1.0%	0.9%
<b>EMA TOTAL</b>	<b>4,121,149</b>	<b>307,898</b>	<b>7.5%</b>	<b>3.6%</b>	<b>2.3%</b>	<b>1.0%</b>	<b>0.6%</b>
Austin	23,345	1,614	6.9%	2.7%	1.6%	1.1%	1.5%
Colorado	19,543	1,886	9.7%	4.1%	2.1%	1.4%	2.1%
Walker	44,904	4,581	10.2%	6.3%	2.1%	0.8%	1.1%
Wharton	40,519	3,679	9.1%	3.8%	2.0%	1.6%	1.7%
<b>HSDA TOTAL</b>	<b>4,249,460</b>	<b>319,658</b>	<b>7.5%</b>	<b>3.7%</b>	<b>2.3%</b>	<b>1.0%</b>	<b>0.6%</b>
<b>TEXAS POPULATION</b>	<b>20,287,300</b>	<b>1,711,001</b>	<b>8.4%</b>	<b>4.2%</b>	<b>2.3%</b>	<b>1.7%</b>	<b>0.8%</b>
Source: U. S. Census Bureau, 2000 (www.census.gov). Retrieved on March 25, 2004.							
*** All the percentages are based on total population of each gender.							

**Table 1.1.17: Houston EMA/HSDA Counties Poverty by Family Level, 2000**

County	Families: Total	Families: Income in 1999 below poverty level	Married- couple family	Male householder; no wife present	Female householder; no husband present	
	N	N	%	%	%	%
Chambers	7,221	601	8.3%	4.4%	0.5%	3.4%
Fort Bend	93,808	5,139	5.5%	2.8%	0.5%	2.2%
Harris	840,630	101,693	12.1%	5.8%	1.1%	5.2%
Liberty	17,937	1,998	11.1%	5.5%	0.8%	4.8%
Montgomery	80,723	5,766	7.1%	3.8%	0.5%	2.9%
Waller	7,837	901	11.5%	6.2%	1.3%	4.1%
<b>EMA TOTAL</b>	<b>1,048,156</b>	<b>116,098</b>	<b>11.1%</b>	<b>5.4%</b>	<b>1.0%</b>	<b>4.7%</b>
Austin	6,493	570	8.8%	5.5%	0.5%	2.8%
Colorado	5,385	660	12.3%	6.2%	0.9%	5.2%
Walker	11,533	1,225	10.6%	5.1%	0.9%	4.6%
Wharton	10,774	1,430	13.3%	6.7%	1.5%	5.0%
<b>HSDA TOTAL</b>	<b>1,082,341</b>	<b>119,983</b>	<b>11.1%</b>	<b>5.4%</b>	<b>1.0%</b>	<b>4.7%</b>
<b>TEXAS POP</b>	<b>5,283,474</b>	<b>632,676</b>	<b>12.0%</b>	<b>6.0%</b>	<b>1.0%</b>	<b>5.1%</b>

## HEALTH AND INSURANCE STATUS

In 2007, Texas had the highest percentage of uninsured residents (26.8%) and the second highest number of uninsured residents (5,765,132) of all US states. The percent uninsured for the EMA was 29.7%, and 28.7% for the overall HSDA.

- Of all the EMA/HSDA counties, Chambers and Fort Bend counties had the lowest percentage of uninsured residents (22.8% each).
- Harris County (31.3%) and Waller County (31.0%) had the highest percentage of uninsured residents.

**Table 1.1.18: Houston EMA/HSDA Counties, Uninsured Residents, 2007**

	Population	Uninsured	Uninsured %
<b>Chambers</b>	26,546	6,064	22.8%
<b>Fort Bend</b>	494,674	112,590	22.8%
<b>Harris</b>	3,650,262	1,141,903	31.3%
<b>Liberty</b>	62,700	16,102	25.7%
<b>Montgomery</b>	389,585	97,892	25.1%
<b>Waller</b>	29,550	9,167	31.0%
<b>EMA Total</b>	4,653,317	1,383,718	29.7%
<b>Austin</b>	22,985	6,248	27.2%
<b>Colorado</b>	16,276	4,709	28.9%
<b>Walker</b>	40,402	11,969	29.6%
<b>Wharton</b>	35,014	9,937	28.4%
<b>HSDA Total</b>	114,677	32,863	28.7%
<b>Texas</b>	21,504,681	5,765,132	26.8%
Source: SAHIE/State and County by Demographic and Income Characteristics/2007, released July 2010.			

## NATALITY CHARACTERISTICS

Natality statistics provide information about births in the region. These include general information such as birth rate and fertility rate as well as risk information that reflect risk to either the mother or baby.

- Harris County has the highest birth rate and fertility rate in both the EMA and the HSDA. The birth rate ranks seventeenth out of all counties in the state, and the

fertility rate is thirty-ninth. High birth and fertility rates result in a growing county population.

- ✚ The nine other EMA and HSDA counties have birth rates and fertility rates that are lower than the state of Texas overall.
- ✚ Wharton County demonstrates the highest risk in the percentage of adolescent mothers and lack of prenatal care in the first trimester, but their percentage of low birth weight infants is one of the lowest in the region.
- ✚ Liberty, Austin, Colorado and Wharton counties have higher percentages of adolescent mothers than found in the state.
- ✚ Chambers, Liberty, Austin and Wharton counties have higher percentages of mothers who do not receive prenatal care in the first trimester than found in the state.
- ✚ Harris, Waller and Colorado counties have higher percentages of low birth weight infants than found in Texas overall. Refer to Table 1.1.19.
- ✚ Infant mortality is presented in Table 1.1.19 with other mortality statistics. Chambers, Liberty, Montgomery, Colorado and Walker counties have higher infant death rates than found in the state overall.

**Table 1.1.19: Houston EMA/HSDA Counties Rates and County Rankings for Natality Characteristics, 1998 - 2000**

County	Crude Birth Rate		Fertility Rate			
	Rate	Rank	Rate	Rank		
EMA						
Chambers	12.1	171	53.2	232		
Fort Bend	14.2	104	58.7	202		
Harris	18.7	17	81.3	39		
Liberty	15.2	71	70.6	88		
Montgomery	15.5	63	67.6	119		
Waller	16.1	50	65.5	147		
HSDA						
Austin	14.8	86	73	72		
Colorado	13	145	67.6	119		
Walker	10.3	225	50	242		
Wharton	14.9	80	71.5	83		
TEXAS	17.4		76.7			
County	Adolescent Mothers		No Prenatal Care First Trimester		Low Birth Weight	
	%	Rank	%	Rank	%	Rank
EMA						
Chambers	4.9	218	22.3	83	6.9	163
Fort Bend	3.4	239	13.4	222	7.3	133
Harris	5.3	207	18.0	144	7.5	113
Liberty	6.5	170	22.3	83	7.3	133
Montgomery	4.4	232	17.8	147	6.5	191
Waller	7.8	111	19.6	123	7.6	108
HSDA						
Austin	6.2	180	22.6	77	6.7	176
Colorado	7.8	111	20.0	114	7.8	87
Walker	5.6	197	15.4	194	7.3	133
Wharton	9.4	53	35.1	15	6.4	197
TEXAS	6.0		20.8		7.4	
Rates reflect averages for 1998 – 2000 values and are per 100,000 population.						
Source: “Selected Demographic & Public Health Measures: Rankings for Texas Counties 1998–2000”.						



## **MORTALITY CHARACTERISTICS**

Mortality characteristics present death rates overall and for specific disease processes. These rates include deaths occurring over three years, 1998 through 2000. The 254 counties throughout Texas are ranked, and these rankings are also presented. (Refer to Table 1.1.20)

- ✚ Liberty County has the highest mortality rate of the 10 HSDA Counties, ranking thirteenth in the state of Texas. They have the highest infant mortality rate in the state, and are in the top 15 for cancer, lower respiratory diseases and accidents.
- ✚ Fort Bend has the lowest death rate of the ten HSDA counties, ranking 197 in the state.
- ✚ Comparing the number of county deaths to overall deaths in the state for specific disease processes, reveals the following:
  - Liberty, Montgomery, Waller, Austin and Colorado counties have higher death rates from heart disease than the state.
  - Fort Bend, Harris, Liberty, Montgomery, Colorado and Walker counties have higher death rates from stroke than found in the state overall.
  - All EMA and HSDA counties except Fort Bend County and Austin County have higher death rates from cancer than Texas overall.
  - Chambers, Liberty, Montgomery, Waller and Walker counties have higher death rates from lower respiratory disease than Texas overall.
  - Chambers, Montgomery, Austin, Colorado and Wharton counties have higher death rates from diabetes than the state overall.
  - All EMA and HSDA counties except Fort Bend County and Harris County have higher death rates from accidents than found in the state.

**Table 1.1.20: Houston EMA/HSDA Counties Rates and County Rankings for Mortality Characteristics Age Adjusted Death Rates per 100,000 Population, 1998 - 2000**

County	All Deaths		Heart		Stroke		Cancer	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank
<b>EMA</b>								
Chambers	888.2	149	237.7	186	138.7	145	227.0	48
Fort Bend	834.5	197	259.1	155	148.2	109	194.6	148
Harris	880.3	161	267.9	147	144.4	124	200.7	128
Liberty	1,092.9	13	323.3	42	147.4	113	265.0	11
Montgomery	981.6	77	295.0	94	155.0	89	225.0	56
Waller	910.2	141	301.0	82	138.9	144	211.0	99
<b>HSDA</b>								
Austin	890	147	331.3	31	131.1	167	188.1	174
Colorado	1,015.5	48	318.6	50	163.0	60	214.3	86
Walker	983.6	74	269.5	143	155.3	87	222.1	69
Wharton	852.9	183	239.4	181	119.9	184	208.3	106
<b>TEXAS</b>	891.2		269.7		141.4		198.8	
County	Lower Respiratory		Diabetes		Accidents		Infant Mortality	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank
<b>EMA</b>								
Chambers	52.5	58	37.4	36	49.5	85	7.4	NR
Fort Bend	34.5	135	24.5	99	25.7	150	4.9	34
Harris	35.5	133	27.0	84	33.9	139	5.7	29
Liberty	69.9	14	25.7	88	78.1	14	11.3	1
Montgomery	56.6	46	31.5	59	47.4	90	6.5	21
Waller	46.4	93	26.4	NR	60.9	43	4.1	NR
<b>HSDA</b>								
Austin	28.8	144	35.5	41	57.5	51	4.8	NR
Colorado	29.7	142	42.6	26	82.4	13	11.6	NR
Walker	40.9	111	30.0	69	51.2	77	8.3	NR
Wharton	21.7	149	43.7	21	42.4	110	2.2	NR
<b>TEXAS</b>	44.8		30.7		38.6		6.1	
Rates reflect averages for 1998 – 2000 values. Source: "Selected Demographic & Public Health Measures: Rankings for Texas Counties 1998-2000" NR = 20 or fewer numerator events in the three year period are not ranked								

## MORBIDITY CHARACTERISTICS

Morbidity characteristics reflect the impact of an illness that does not result in death. The following presents the morbidity for three sexually transmitted diseases (STD): chlamydia, gonorrhea and AIDS. (Refer to Table 1.1.21)

- ⚡ Waller County has among the highest rates of both chlamydia and gonorrhea infection in the state, ranking sixth for the former and seventh for the latter.
- ⚡ Harris County is second in the state for AIDS morbidity, and also ranks highly for both STDs.
- ⚡ In the HSDA, both Walker and Wharton counties are in the top 50 counties in Texas for chlamydia and gonorrhea, with Wharton ranking 34 for the former and 28 for the latter, and Walker ranking 42 and 48, respectively.

**Table 1.1.21: Houston EMA/HSDA Counties Rates and County Rankings for Morbidity Characteristics, 1998 - 2000**

County	Reported Cases: Chlamydia		Reported Cases: Gonorrhea		Reported Cases: AIDS	
	Rate	Rank	Rate	Rank	Percent	Rank
<b>EMA</b>						
Chambers	69.3	196	18.0	NR	5.1	NR
Fort Bend	137.1	167	62.0	97	7.8	24
Harris	347.6	41	193.4	23	30.5	2
Liberty	170.7	141	77.3	87	10.3	16
Montgomery	108.6	181	43.6	120	6.5	32
Waller	611.8	6	325.8	7	6.7	NR
<b>HSDA</b>						
Austin	142	158	80.9	84	5.7	NR
Colorado	175.3	138	84.3	80	0	NR
Walker	340.5	42	131.8	48	2.9	NR
Wharton	363.5	34	183.3	28	4.8	NR
<b>TEXAS</b>	316.4		162.4		16.2	
Rates reflect averages for 1998 – 2000 values and are per 100,000 population. Source: "Selected Demographic & Public Health Measures: Rankings for Texas Counties 1998-2000" NR = 20 or fewer numerator events in the three year period are not ranked.						

## MEDICALLY UNDERSERVED

Medically underserved status is designated to areas or populations having a shortage of personal health care services according to U. S. Department of Health and Human Services' rules. Designations are based on weighted values assigned to the following four health care demands and resource indicators:

- Percentage of elderly population (over 65 years)
- Poverty rate
- Infant mortality rate
- Ratio of primary care physicians per 1,000 population

In order to be considered medically underserved the index score of these indicators will be less than or equal to the national average of 62.

- ✚ Medically Underserved Areas (MUAs) are based on the demographics of the entire population in an area and the overall index scores are less than or equal to 62.
- ✚ Medically Underserved Populations (MUPs) focus on specific populations and represent only a portion of an area's population. These specific populations encounter barriers to primary care access. The barriers may be economic (e.g. low income or Medicaid-eligible populations) or sociologic (e.g. cultural or linguistic). For only these populations the index score is less than or equal to 62. Other populations may have higher scores.
- ✚ Exceptional MUPs (MUP-GOV) have index scores above the designated 62, but unusual local conditions that serve as barriers to access or availability of personal health services. The governor makes the MUP designation.

Nationally MUAs and MUPs were designated over five to ten years ago and are not regularly reviewed. Within the Houston area HSDA, however, most have been designated within the last two to four years, indicating a more current shortage.

- ✚ All of the HSDA counties have full or partial designation as MUA. Six entire counties are designated as medically underserved.
- ✚ Harris County has 18 neighborhoods with MUA designated census tracts. In addition, Harris County has four MUPs, one of which was designated by the governor.
- ✚ Montgomery, Fort Bend and Colorado counties have MUA designated census tracts.

**Table 1.1.22: Houston EMA/HSDA Counties Medically Underserved Areas, 2004**

County	Designation	Area Description
Chambers	MUA	Whole County
Fort Bend	MUA	Census Tracts 704-706, 707.02-707.03, 707.11, 707.21, 711-714
Harris	MUA	<p>Acres Home, Census Tracts 524, 525.02-525.04, 530.02, 531.01, 531.03, 530.03</p> <p>Aldine, Census Tracts 222.01, 222.02, 223.01, 223.02, 223.03, 224.01, 240.02</p> <p>Baytown, Census Tracts 264, 264.99, 265, 266, 270, 271, 272, 273</p> <p>Casa de Amigo, Census Tracts 503.01, 503.02, 505.01, 505.02, 506.01, 506.02, 507.01, 507.02, 508, 509.02, 509.03, 512, 514.01, 514.02, 515.02</p> <p>Central Harris, Census Tracts 201.01, 201.02, 204.00, 205.03, 502.00, 504.00</p> <p>East-Central Houston, Census Tracts 202.10, 202.20, 203.01, 203.02, 203.03, 208.02, 208.03, 209, 210.01, 214.01</p> <p>Galena Park/Jacinto City, Census Tracts 210.22, 211, 211.99, 212, 232, 232.99</p> <p>ID 03465, Census Tracts 400.25, 400.26, 401.01, 401.02, 402.01, 402.02</p> <p>Independence Heights, Census Tracts 509.01, 510.00, 519.02, 520.01, 520.03, 520.02, 521.01-521.03</p> <p>North Central, Census Tracts 240.01, 240.03, 532.02, 533.01-533.03, 535.20</p> <p>Northeast Central, Census Tracts 311.00, 311.99, 312.00</p> <p>Ripley, Census Tracts 300.22, 300.23, 301.01, 301.02, 302, 308.2, 309.01, 309.02, 309.03, 310, 313.01, 313.02, 314.02, 319.01, 321.01, 321.02</p> <p>Settegast, Census Tracts 207.01, 207.02, 208.01, 215.01, 215.02, 215.03, 216.01, 216.02, 217.01, 217.02, 218.01, 218.02, 218.03, 218.04, 219.00, 225.03, 225.04, 227.00</p> <p>South Central, Census Tracts 318.02, 318.03, 319.02, 325.01, 325.02, 327.01, 327.02, 328.01, 328.02, 328.03, 339.03, 340, 342, 343.01, 343.02</p> <p>South Service Area, Census Tracts 329.02, 329.03</p> <p>Southern Third Ward, Census Tracts 3122-3124, 3127-3130, 3132-3138</p> <p>Trinity Gardens, Census Tracts 205.01, 205.98, 206.01, 206.98, 207.03, 207.04</p> <p>West Pasadena, Census Tracts 350.01, 350.02, 350.03, 350.04, 351, 353.01, 356.01, 356.02, 356.03</p>
	MUP	<p>Alief, Low Income, Census Tracts 424.01, 435.01, 435.02</p> <p>Spring Branch, Low Income, Census Tracts 5201-5207, 5210-5224</p> <p>Third Ward, Low Income, Census Tracts 300.24, 303.00, 304.01, 304.02, 305.01, 305.02</p>
	MUP-GOV	S.W. Houston, Spanish-speaking, Poverty: Census Tracts 416.01, 419.01, 419.04-419.06, 423.05, 423.07, 424.02, 424.03, 425.04
Liberty	MUA	Whole County
Montgomery	MUA	Census Tracts 904, 905, 910.10, 910.20, 911.02, 912.01

(Table Continues)

(Table Continued)

County	Designation	Area Description
Waller	MUA	Whole County
Austin	MUA	Whole County
Colorado	MUA	Census tracts 1501, 1502
Wharton	MUA	Whole County
Walker	MUA	Whole County
Data Source: U. S. Department of Health and Human Services, Public Health Service, Health Resources and Services Administration (HRSA), Bureau of Primary Health Care, Shortage Designation Branch, 4350 East-West Highway, 9th Floor, Bethesda, MD 20814 Prepared by: Texas Department of State Health Services, Center for Health Statistics, Health Professions Resource Center. Designations as of 6/4/04. <a href="http://www.DSHS.state.tx.us/dpa/01mua-wc.htm">www.DSHS.state.tx.us/dpa/01mua-wc.htm</a>		

## HOMELESSNESS

In March 2003, the Coalition for the Homeless of Houston/Harris County, Inc. published their report, "Homeless Service Demands 2003, An Analysis of Trends, Services, Demographics." This report, while not specific to people living with HIV disease, provides background information on homelessness nationally and in the Houston area. It includes results of a survey of homeless individuals and homeless shelter providers. Key points to consider include:

- ⓧ Recent studies reveal that men continue to be the most represented group among the homeless, but families with children are increasing at a rapid rate. A 2001 U. S. Conference of Mayors Survey projects 40% of homeless are families.
- ⓧ This same study states the homeless population is 50% African-American, 35% white/Anglo, 12% Hispanic, 2% Native American and 1% Asian.
- ⓧ According to the National Coalition for the Homeless, as many as 22% of single adult homeless individuals have some form of "severe and persistent mental illness;" 34% have addiction disorders; approximately half of homeless women and children have experienced recent domestic violence.
- ⓧ One of the main reasons for homelessness is an increasing lack of affordable housing, due to increasing rents.

The survey of 18 emergency shelter providers, conducted in January 2003, found an overall average of over 100% occupancy in Houston and Harris County. Occupancy rates ranged from 14% for a shelter in Humble to 149% for a large shelter in Houston. Shelters by type of clients served are presented in Table 1.1.24.

- ⚡ Providers reported that of their clients, 81.5% were male and 19.5% were female. In addition, 58% were African-American, 23% white/Anglo, 14% Hispanic, 4% Native American and 1% Asian.

**Table 1.1.23: Available Emergency Shelter Beds and Occupancy, Houston and Harris County, 2003**

Area	Available Beds	Emergency Shelter Clients	Percent Occupancy
Harris County	1,996	2,068	103.6%
Houston	1,680	1,818	108.2%
Source: "Homeless Service Demands 2003, An Analysis of Trends, Services, Demographics"			

**Table 1.1.24: Available Emergency Shelter by Type Harris County, 2003**

Type of Shelter	#	%
Family	5	15.6%
Men	8	25.0%
Women	6	18.8%
Women with Children	9	28.1%
Men with Children	2	6.3%
Youth	1	3.1%
Other	1	3.1%
<b>Total</b>	<b>32</b>	<b>100.0%</b>
Source: "Homeless Service Demands 2003, An Analysis of Trends, Services, Demographics" based on survey of 18 shelters. Shelters may provide services to multiple populations		

## **QUESTION 1.2:**

**WHAT IS THE SCOPE OF THE HIV/AIDS  
EPIDEMIC IN THE HOUSTON REGION?**



## **WHAT IS THE SCOPE OF THE HIV/AIDS EPIDEMIC IN THE HOUSTON REGION?**

The HIV/AIDS epidemic has affected people of all gender, age and racial/ethnic groups in the Houston region. This effect, however, has not been the same for all groups. In the beginning of the epidemic, HIV disease was most often found among white men who have sex with men (MSM). Although these men are still significantly affected by the epidemic, African-Americans currently represent the majority of cases. Data also suggest that trends in HIV disease may be increasing among women.

This section provides detailed information about demographic and risk characteristics of people with HIV disease. It describes cases reported through December 31, 2008. Since there is typically a reporting lag for mortality (death), 2007 is considered the most complete year for mortality data and is used in this report.

This report uses Texas Department of State Health Services (DSHS) HIV/AIDS Reporting System (HARS) surveillance data through December 31, 2008. Although this is the most current data available for the purposes of this report, newly diagnosed cases and prevalence (people living with HIV/AIDS, or PLWHA) data may be incomplete due to delays in data reporting and processing. In general, however, the data presented here provides an accurate picture of the overall epidemic and its current trends.

Cases of newly diagnosed HIV in 2008 and people living with HIV (not AIDS), or PLWH, can generally be thought of as people that became infected more recently than new AIDS diagnoses and people living with AIDS (PLWA). This analysis will compare newly diagnosed cases with living cases to identify trends in the epidemic in the Houston EMA and HSDA. Although various tables may appear similar because differences between the two regions are relatively small, please be aware that EMA-specific tables follow HSDA tables. For special populations, new cases are identified for the HSDA only, as the differences are so small that the proportions are virtually identical to new cases among the EMA.







### **DATA SOURCES**

Unless otherwise noted, all surveillance data are from the Texas DSHS HARS. The data represents cases through December 31, 2008, extracted as of September 2009. Please note that the data has not been adjusted for reporting delay nor redistributed for unreported risk exposure. The category of NIR/NRR (No Indicated Risk or No Reported Risk) represents cases of HIV or AIDS whose associated transmission modes remain unclassified. Rates are calculated as cases per 100,000 based upon 2007 and 2008 population estimates from the DSHS Center for Health Statistics.

## **HIV AND AIDS INCIDENCE (NEW DIAGNOSES)**

Incidence is a term commonly used in epidemiology to refer to newly diagnosed cases. Incidence may be defined over a period of time that the new cases were diagnosed. *For the purposes of this report, incidence reflects cases diagnosed throughout 2008, and newly diagnosed AIDS cases include both previously diagnosed HIV cases that have progressed to AIDS as well as newly identified AIDS cases that have not been previously identified as HIV positive.*

In 2008, the HSDA had a total of 1,903 newly diagnosed HIV/AIDS cases while the EMA had 1,872 HIV/AIDS cases.

-  There were 1,029 newly diagnosed HIV cases that had not progressed to AIDS in the HSDA, and 874 new AIDS diagnoses. In the EMA, these numbers were 1,016 for HIV and 856 for AIDS. Since the numbers are similar, the 2008 HIV infection rate is approximately 20 per 100,000 for both the HSDA and EMA. The demographic proportions of those newly diagnosed with HIV/AIDS are almost identical in the EMA and HSDA.
-  Blacks had the highest rate of new HIV infections (65 per 100,000 in the HSDA, increased from 59 in 2007). This is almost six times greater than the rate for Hispanics (12 per 100,000) and seven times that of Whites (9 per 100,000).
-  Generalizing about transmission mode is difficult since unreported risk is very high among the newly diagnosed. Unreported risk among those with new HIV diagnoses accounts for approximately 33%, while 24% of new AIDS diagnoses have unreported risk behavior.
  -  Forty-four percent (44%) of new HIV infections were attributed to MSM, and 20% were attributed to heterosexual contact. These two transmission modes accounted for the highest proportion of newly diagnosed HIV infections during 2008 compared to intravenous drugs users (3%) and MSM/IDU (1%).
-  Harris County clearly remains the epicenter of the epidemic with 92% and 93% of 2008 newly diagnosed HIV and AIDS cases in the HSDA and EMA, respectively.
-  From 2004 to 2006, the rate of HIV diagnoses appeared to remain relatively stable at around 17 per 100,000. Since 2006, it has demonstrated an increase, to approximately 20 per 100,000 (15% increase). For AIDS diagnoses, the rate has remained around 20 per 100,000 from 2004 to 2006. Since 2006, the rate has declined, to around 17 per 100,000 in 2008 (15% decrease).

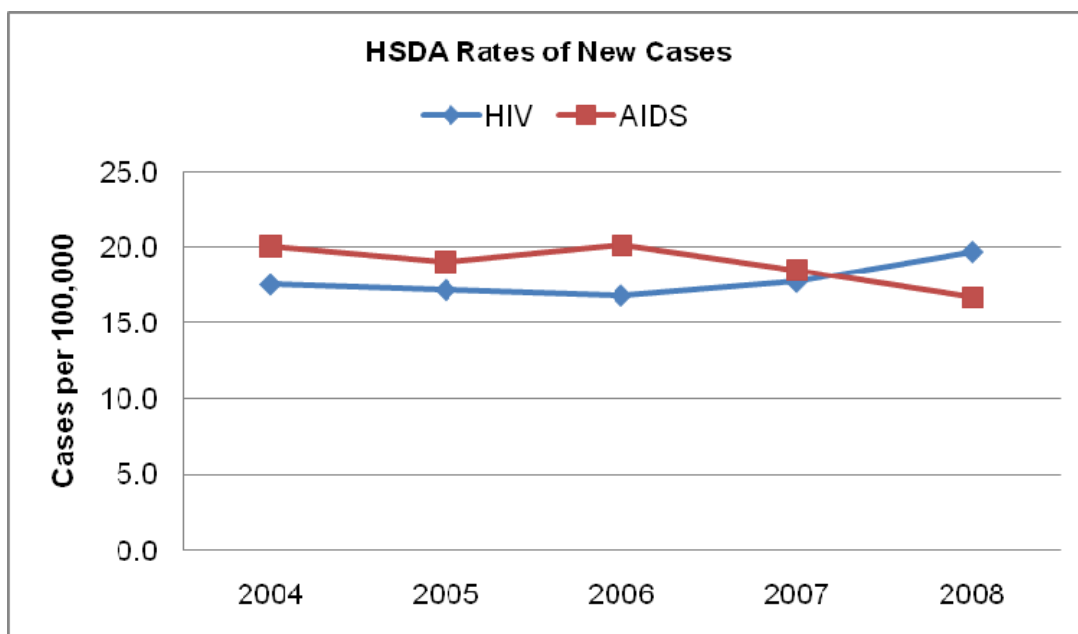
**Table 1.2.1: HSDA Incidence of HIV and AIDS, 2008**

HSDA	New HIV			New AIDS			New HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	1,029	100.0	19.7	874	100.0	16.7	1,903	100.0	36.4
<b>Gender</b>									
Male	771	74.9	29.3	621	71.1	23.6	1,392	73.1	52.9
Female	258	25.1	9.9	253	28.9	9.7	511	26.9	19.6
<b>Race/Ethnicity</b>									
White	187	18.2	9.2	160	18.3	7.9	347	18.2	17.2
Black	598	58.1	65.2	484	55.4	52.8	1,082	56.9	118.0
Hispanic	221	21.5	11.5	214	24.5	11.1	435	22.9	22.6
Other	23	2.2	6.2	16	1.8	4.3	39	2.0	10.5
<b>Age (yrs)</b>									
0-1	2	0.2	1.1	0	0.0	0.0	2	0.1	1.1
2-12	1	0.1	0.1	0	0.0	0.0	1	0.1	0.1
13-24	239	23.2	25.3	61	7.0	6.5	300	15.8	31.8
25-34	324	31.5	38.9	259	29.6	31.1	583	30.6	69.9
35-44	264	25.7	33.4	288	33.0	36.4	552	29.0	69.8
45-54	147	14.3	20.1	183	20.9	25.0	330	17.3	45.1
55+	52	5.1	5.7	83	9.5	9.1	135	7.1	14.8
<b>Transmission Mode</b>									
MSM	450	43.7	*	310	35.5	*	760	39.9	*
IDU	28	2.7	*	86	9.8	*	114	6.0	*
MSM & IDU	8	0.8	*	36	4.1	*	44	2.3	*
Heterosexual	197	19.1	*	231	26.4	*	428	22.5	*
Perinatal Exposure	2	0.2	*	4	0.5	*	6	0.3	*
NIR/NRR	344	33.4	*	207	23.7	*	551	29.0	*
Other	0	0	*	0	0	*	0	0	*
<b>Location</b>									
Harris County	953	92.6	24.0	794	90.8	20.0	1,747	91.8	44.1
Non-Harris County	76	7.4	6.0	80	9.2	6.3	156	8.2	12.3
Data source: Texas DSHS HARS Data									

**Table 1.2.2: EMA Incidence of HIV and AIDS, 2008**

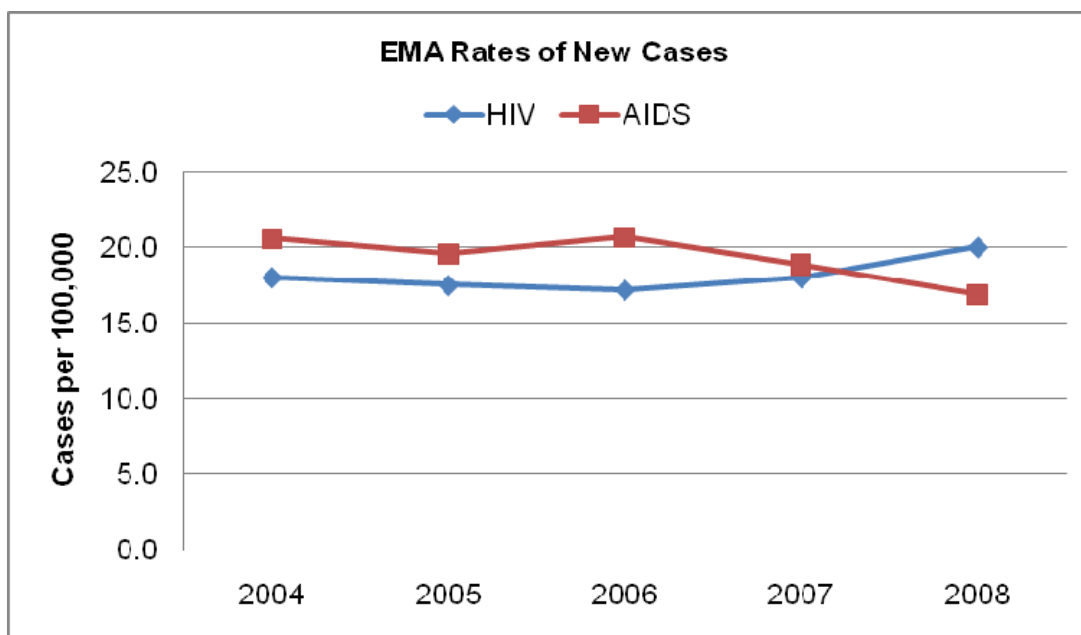
EMA	New HIV			New AIDS			New HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	1,016	100.0	20.0	856	100.0	16.9	1,872	100.0	36.9
<b>Gender</b>									
Male	768	75.6	30.2	607	70.9	23.8	1,375	73.5	54.0
Female	248	24.4	9.8	249	29.1	9.8	497	26.5	19.6
<b>Race/Ethnicity</b>									
White	183	18.0	9.5	157	18.3	8.1	340	18.2	17.6
Black	591	58.2	66.4	472	55.1	53.1	1,063	56.8	119.5
Hispanic	220	21.7	11.7	212	24.8	11.2	432	23.1	22.9
Other	22	2.2	5.9	15	1.8	4.0	37	2.0	10.0
<b>Age (yrs)</b>									
0-1	2	0.2	1.2	0	0.0	0.0	2	0.1	1.2
2-12	1	0.1	0.1	0	0.0	0.0	1	0.1	0.1
13-24	235	23.1	25.8	59	6.9	6.5	294	15.7	32.3
25-34	321	31.6	39.5	255	29.8	31.4	576	30.8	71.0
35-44	262	25.8	34.0	283	33.1	36.7	545	29.1	70.7
45-54	144	14.2	20.3	180	21.0	25.3	324	17.3	45.6
55+	51	5.0	5.8	79	9.2	9.0	130	6.9	14.9
<b>Transmission Mode</b>									
MSM	449	44.2	*	305	35.6	*	754	40.3	*
IDU	28	2.8	*	83	9.7	*	111	5.9	*
MSM & IDU	8	0.8	*	33	3.9	*	41	2.2	*
Heterosexual	190	18.7	*	229	26.8	*	419	22.4	*
Perinatal Exposure	2	0.2	*	4	0.5	*	6	0.3	*
NIR/NRR	339	33.4	*	202	23.6	*	541	28.9	*
Other	0	0.0	*	0	0.0	*	0	0.0	*
<b>Location</b>									
Harris County	953	93.8	24.0	794	92.8	20.0	1,747	93.3	44.1
Non-Harris County	63	6.2	5.7	62	7.2	5.6	125	6.7	11.3
Data source: Texas DSHS HARS Data									

**Figure 1.2.1: HSDA rates of new HIV/AIDS cases, 2004 – 2008**



Data source: Texas DSHS HARS Data






**Figure 1.2.2: EMA rates of new HIV/AIDS cases, 2004 – 2008**



Data source: Texas DSHS HARS Data

## **HIV AND AIDS PREVALENCE (PEOPLE LIVING WITH HIV AND AIDS)**

While incidence looks at newly diagnosed cases of HIV and AIDS, prevalence identifies the total number of people living with the disease. The data presented here includes all reported cases of living people diagnosed with HIV and AIDS through the end of 2008.

-  The difference in the number of PLWHA does not vary significantly between the EMA and HSDA. In 2008, a total of 20,190 people were living with either HIV or AIDS in the HSDA. This compares to 20,024 in the EMA. The EMA includes 99% of people with HIV or AIDS in the HSDA. All demographic proportions reported are the same in the EMA and the HSDA.
-  Comparing PLWH to PLWA reveals an increase in HIV disease among women.
  - Women accounted for approximately 31% of people living with HIV, but were only 24% of people living with AIDS, an indication of increasing new infections among women.
  - In 2005, the prevalence rate of AIDS among men was about four times that of women's, now in 2008, the rate has declined to three times that of women's.
-  Notably, data is showing a possible increase in HIV disease among youth aged 13 to 24: 8% among PLWH are youth while only 2% among PLWA are youth, and the HIV prevalence rate for youth is 74 per 100,000 while the AIDS prevalence rate for youth is only 27 per 100,000.
-  Blacks are disproportionately affected by HIV and AIDS with the prevalence rates and proportions both significantly higher among Black PLWHA than other racial or ethnic groups.
  - Comparing HIV/AIDS rates, Blacks have an overall rate (1078 per 100,000) that is five times higher than Hispanics, while the HIV (not AIDS) rate (491 per 100,000) is six times higher than Hispanics.
  - The overall rate is almost four times higher among Black PLWHA than White PLWHA.
  - Blacks account for 53% of PLWH while among PLWA, they account for 46% - this may indicate an increase in HIV infection among the Black/African-American population.
-  For transmission mode, comparisons are more challenging considering the high percentages of people with unreported or unclassified risk (category of NIR/NRR).
  - The most frequently reported mode of HIV transmission is the category of MSM, with 40% of PLWH and 44% of PLWA reporting this as their mode of infection.

- Approximately 25% of PLWHA reported their risk behavior as heterosexual transmission. For unreported risk, HIV cases accounted for 22% while AIDS cases accounted for only 12%.
- Similar to new diagnoses, Harris County is home to 94% of people living with both HIV and AIDS. This proportion is the same for PLWH and PLWA.
- The five-year trend in the rates of living cases, from 2004 and 2008, shows the following:
  - Prevalence data show an overall steady, increasing trend in the rates of living AIDS cases, at 386 per 100,000 in the HSDA and 394 per 100,000 in the EMA. Since 2008, the AIDS prevalence rate has increased about 13%.
  - For HIV prevalence rates, data show a slight increase of approximately 5% from 2004 to 2008. The current HIV prevalence rates for the HSDA and EMA are 166 and 162 per 100,000, respectively.

**Table 1.2.3: HSDA Prevalence of HIV and AIDS, 2008**

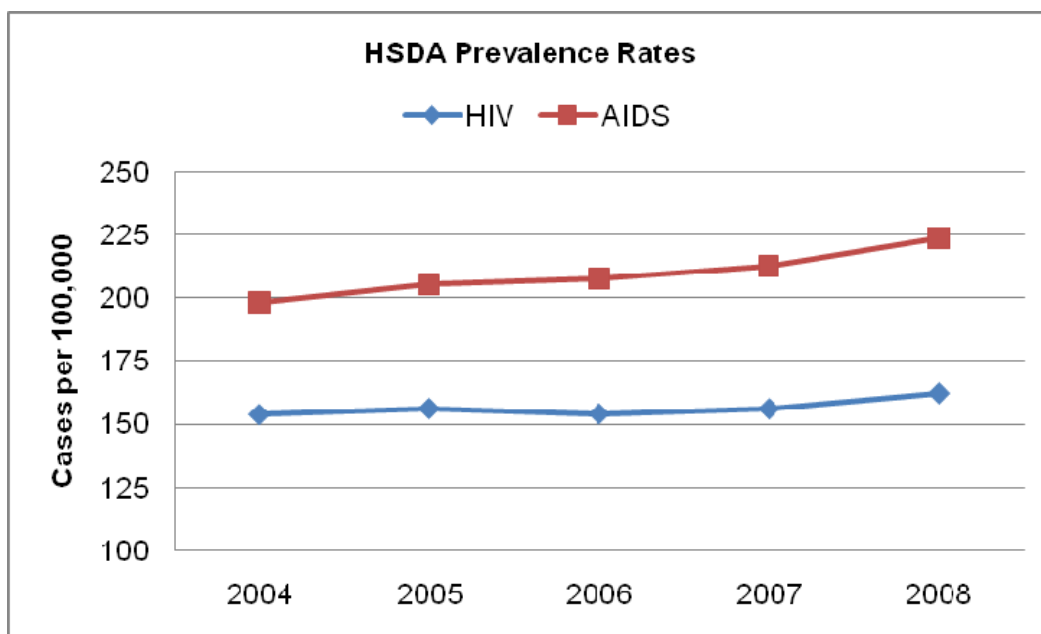
HSDA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	8,481	100.0	162.1	11,709	100.0	223.8	20,190	100.0	385.8
<b>Gender</b>									
Male	5,897	69.5	224.2	8,921	76.2	339.2	14,818	73.4	563.4
Female	2,584	30.5	99.3	2,788	23.8	107.1	5,372	26.6	206.4
<b>Race/Ethnicity</b>									
White	2,228	26.3	110.2	3,540	30.2	175.1	5,768	28.6	285.2
Black	4,500	53.1	490.7	5,381	46.0	586.8	9,881	48.9	1,077.5
Hispanic	1,627	19.2	84.7	2,657	22.7	138.3	4,284	21.2	223.0
Other	126	1.5	33.9	131	1.1	35.2	257	1.3	69.0
<b>Age (yrs)</b>									
0-1	5	0.1	2.9	1	0.0	0.6	6	0.0	3.4
2-12	87	1.0	10.3	10	0.1	1.2	97	0.5	11.4
13-24	701	8.3	74.3	253	2.2	26.8	954	4.7	101.1
25-34	2,226	26.2	267.0	1,508	12.9	180.9	3,734	18.5	447.8
35-44	2,690	31.7	340.0	3,797	32.4	479.9	6,487	32.1	820.0
45-54	1,974	23.3	269.9	4,105	35.1	561.3	6,079	30.1	831.2
55+	798	9.4	87.5	2,035	17.4	223.2	2,833	14.0	310.8
<b>Transmission Mode</b>									
MSM	3,422	40.3	*	5,169	44.1	*	8,591	42.6	*
IDU	643	7.6	*	1,380	11.8	*	2,023	10.0	*
MSM & IDU	288	3.4	*	739	6.3	*	1,027	5.1	*
Heterosexual	2,076	24.5	*	2,867	24.5	*	4,943	24.5	*
Perinatal Exposure	149	1.8	*	81	0.7	*	230	1.1	*
NIR/NRR	1,890	22.3	*	1,445	12.3	*	3,335	16.5	*
Other	13	0.2	*	28	0.2	*	41	0.2	*
<b>Location</b>									
Harris County	7,962	93.9	200.8	10,996	93.9	277.3	18,958	93.9	478.0
Non-Harris County	519	6.1	41.0	713	6.1	56.3	1,232	6.1	97.2
Data source: Texas DSHS HARS Data									



**Table 1.2.4: EMA Prevalence of HIV and AIDS, 2008**

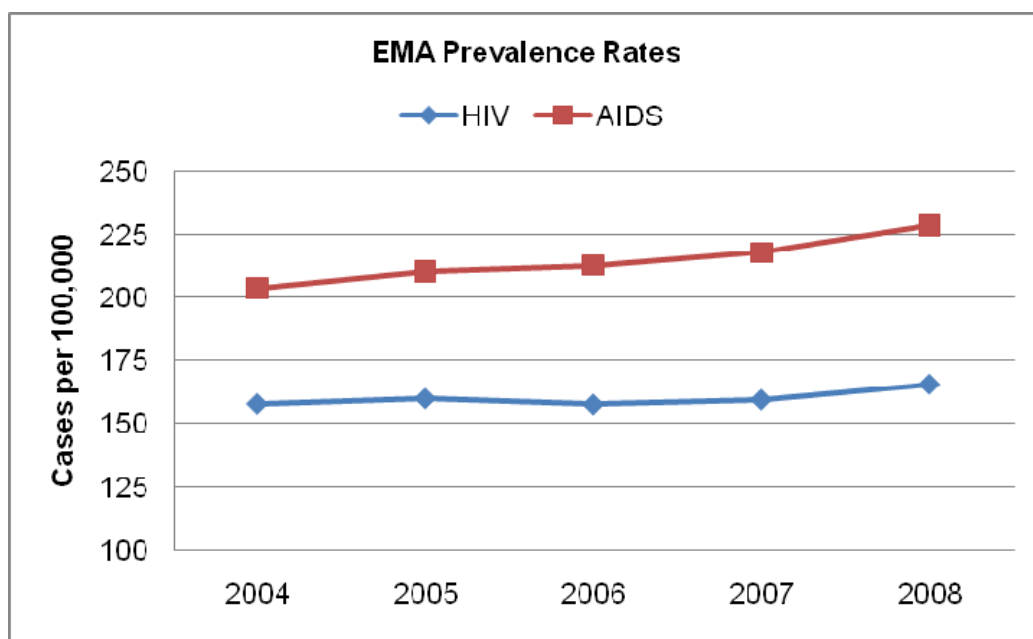
EMA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	8,407	100.0	165.6	11,617	100.0	228.8	20,024	100.0	394.4
<b>Gender</b>									
Male	5,863	69.7	230.2	8,856	76.2	347.8	14,719	73.5	578.0
Female	2,544	30.3	100.6	2,761	23.8	109.1	5,305	26.5	209.7
<b>Race/Ethnicity</b>									
White	2,209	26.3	114.4	3,505	30.2	181.5	5,714	28.5	295.8
Black	4,462	53.1	501.7	5,341	46.0	600.5	9,803	49.0	1,102.1
Hispanic	1,612	19.2	85.5	2,641	22.7	140.1	4,253	21.2	225.6
Other	124	1.5	33.4	130	1.1	35.1	254	1.3	68.5
<b>Age (yrs)</b>									
0-1	5	0.1	2.9	1	0.0	0.6	6	0.0	3.5
2-12	87	1.0	10.5	10	0.1	1.2	97	0.5	11.7
13-24	689	8.2	75.6	248	2.1	27.2	937	4.7	102.9
25-34	2,200	26.2	271.0	1,497	12.9	184.4	3,697	18.5	455.5
35-44	2,673	31.8	346.6	3,770	32.5	488.8	6,443	32.2	835.4
45-54	1,961	23.3	276.1	4,076	35.1	573.8	6,037	30.1	849.8
55+	792	9.4	90.5	2,015	17.3	230.3	2,807	14.0	320.9
<b>Transmission Mode</b>									
MSM	3,405	40.5	*	5,143	44.3	*	8,548	42.7	*
IDU	642	7.6	*	1,364	11.7	*	2,006	10.0	*
MSM & IDU	288	3.4	*	731	6.3	*	1,019	5.1	*
Heterosexual	2,058	24.5	*	2,852	24.6	*	4,910	24.5	*
Perinatal Exposure	149	1.8	*	79	0.7	*	228	1.1	*
NIR/NRR	1,852	22.0	*	1,420	12.2	*	3,272	16.3	*
Other	13	0.2	*	28	0.2	*	41	0.2	*
<b>Location</b>									
Harris County	7,962	94.7	200.8	10,996	94.7	277.3	18,958	94.7	478.0
Non-Harris County	445	5.3	40.1	621	5.3	55.9	1,066	5.3	96.0
Data source: Texas DSHS HARS Data									

**Figure 1.2.3: HSDA HIV/AIDS Prevalence Rates, 2004 – 2008**



Data Source: Texas DSHS HARS Data

**Figure 1.2.4: EMA HIV/AIDS Prevalence Rates, 2004 – 2008**



Data Source: Texas DSHS HARS Data

## MORTALITY

Since reporting of deaths (mortality reports) of PLWHA is often delayed due to the confirmation and checking that is required, 2007 mortality data is the most recent year that is considered complete and will be presented in this report. It should be noted that deaths may be due to HIV disease as well as other causes. Since mortality data is almost identical in the EMA and HSDA, only the mortality data for the HSDA will be presented for the purposes of this report.

- ✚ In the HSDA, 73 deaths were among those with HIV, and 467 were among those with AIDS, giving a total of 540 deaths of PLWHA. For the EMA, the total number of deaths was four fewer, at 536.
- ✚ The rate of death among men with HIV (not AIDS) was almost five times as high as the death rate among women with HIV (not AIDS). Overall, the death rate of Male PLWHA was three times as high as Female PLWHA.
- ✚ The rates of death among PLWHA were highest among Blacks compared to all other racial/ethnic groups.
  - The overall HIV/AIDS mortality rate among Black PLWHA (34 per 100,000) was nine times that of Hispanics and almost five times that of White PLWHA.
  - Black females living with HIV/AIDS had a striking mortality rate (20 per 100,000) of 12 times that of Hispanic females and 9 times that of White females living with HIV/AIDS.
- ✚ HIV/AIDS mortality data showed that adults aged 45 to 54 had the highest rate of death, at 29/100,000 when compared to the other age groups.
- ✚ For transmission mode, the highest proportion of HIV/AIDS mortality was among MSM at 33%. Deaths among those with AIDS were highest among MSM cases (34%) followed by cases related to heterosexual contact (29%). For deaths among PLWH, the highest proportion was also among MSM at 26%. Note the high percentage of NIR/NRR among PLWH (34%).
- ✚ From 2003 to 2007, the HIV death rate for PLWHA has remained relatively stable, at approximately 11 deaths per 100,000 cases. Future releases of this data should be monitored for any continuing trends in HIV/AIDS mortality.

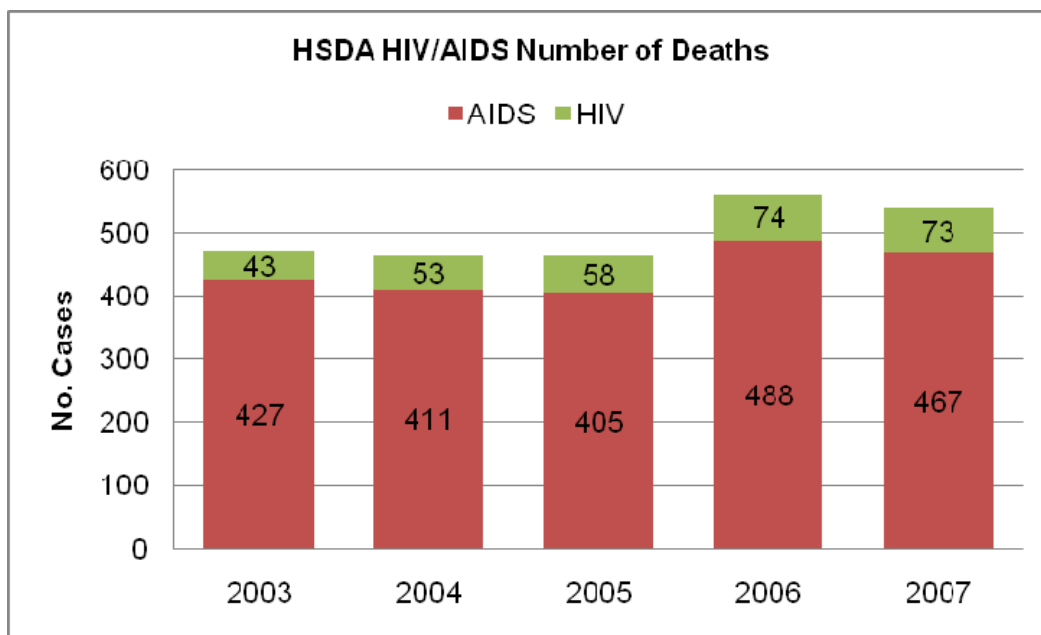
**Table 1.2.5: HSDA Deaths among HIV and AIDS Cases, 2007**

HSDA	HIV Deaths			AIDS Deaths			HIV/AIDS Deaths		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	73	100.0	1.4	467	100.0	9.1	540	100.0	10.5
<b>Gender</b>									
Male	59	80.8	2.3	343	73.4	13.3	402	74.4	15.6
Female	14	19.2	0.5	124	26.6	4.9	138	25.6	5.4
<b>Race/Ethnicity</b>									
White	26	35.6	1.3	126	27.0	6.2	152	28.1	7.5
Black	40	54.8	4.4	272	58.2	30.0	312	57.8	34.4
Hispanic	7	9.6	0.4	65	13.9	3.6	72	13.3	3.9
Other	0	0.0	0.0	4	0.9	1.1	4	0.7	1.1
<b>Age (yrs)</b>									
13-24	3	4.1	0.3	6	1.3	0.6	9	1.7	1.0
25-34	6	8.2	0.7	54	11.6	6.7	60	11.1	7.4
35-44	15	20.5	1.9	150	32.1	19.3	165	30.6	21.2
45-54	27	37.0	3.7	180	38.5	25.0	207	38.3	28.7
55+	22	30.1	2.5	77	16.5	8.8	99	18.3	11.3
<b>Transmission Mode</b>									
MSM	19	26.0	*	158	33.8	*	177	32.8	*
IDU	11	15.1	*	73	15.6	*	84	15.6	*
MSM & IDU	4	5.5	*	37	7.9	*	41	7.6	*
Heterosexual	13	17.8	*	133	28.5	*	146	27.0	*
Perinatal Exposure	0	0.0	*	0	0.0	*	0	0.0	*
NIR/NRR	25	34.2	*	66	14.1	*	91	16.9	*
Other	1	1.4	*	0	0.0	*	1	0.2	*
<b>Location</b>									
Harris County	67	91.8	1.7	444	95.1	11.4	511	94.6	13.1
Non-Harris County	6	8.2	0.5	23	4.9	1.9	29	5.4	2.4
Data Source: Texas DSHS HARS Data									

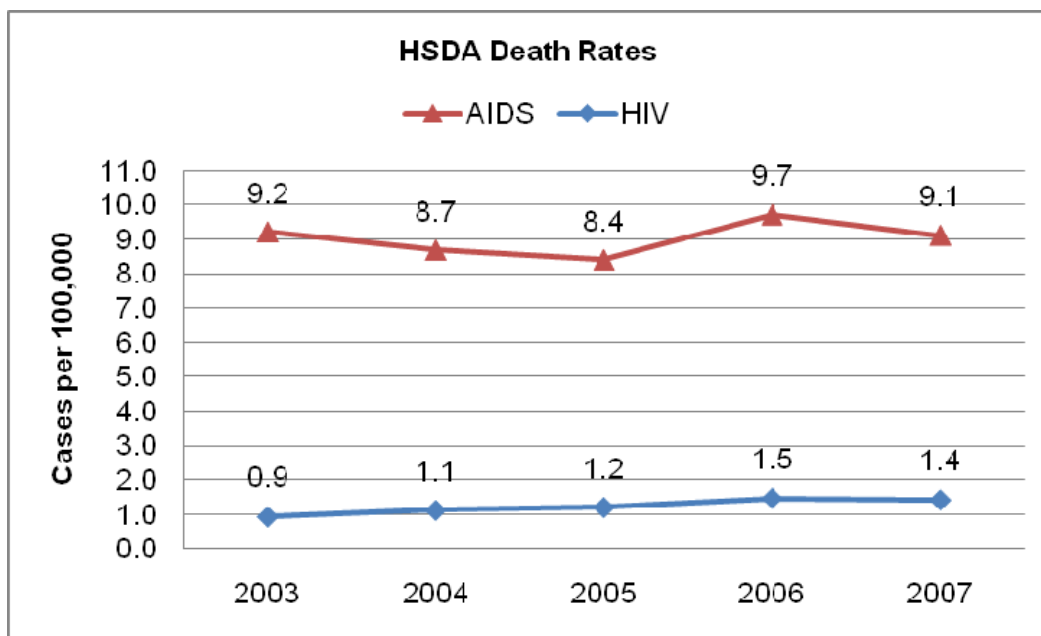
**Table 1.2.6: HSDA Deaths of Persons with HIV/AIDS, 2007**

HSDA	Male			Female			Total		
	#	%	Rate	#	%	Rate	#	%	Rate
White	129	23.9	12.8	23	4.3	2.2	152	28.1	7.5
Black	213	39.4	49.5	99	18.3	20.8	312	57.8	34.4
Hispanic	57	10.6	6.0	15	2.8	1.7	72	13.3	3.9
Other	3	0.6	1.7	1	0.2	0.6	4	0.7	1.1
Total	402	74.4	15.6	138	25.6	5.4	540	100.0	10.5
Data Source: Texas DSHS HARS Data									

**Figure 1.2.5: HSDA Trends in Deaths of Persons with HIV and AIDS, 2003 – 2007**



**Figure 1.2.6: HSDA Trends in Deaths of Persons with HIV and AIDS, 2003 – 2007**



Data Source: Texas DSHS HARS Data

## **HIV WITH TUBERCULOSIS COMORBIDITY**

Tuberculosis (TB) may present as a comorbid condition with HIV/AIDS. People with HIV are more susceptible to TB, and it can be more difficult to treat in people with AIDS. Data from Texas DSHS HARS and the City of Houston help us understand the number of people who are co-infected with HIV.

The data from DSHS and the City of Houston may differ due to how the data are collected by each agency.

- ⚡ The Texas DSHS maintains information on TB diagnoses for all people diagnosed with HIV or AIDS. The advantage of DSHS data is that the entire HSDA is included. Data on the dates of TB diagnosis is limited, however. Therefore, DSHS data on TB is best considered only for those newly diagnosed, since those are the only cases that can be confirmed during the current year. In addition, there may be a reporting delay with regards to the DSHS data when compared to the Houston data.
- ⚡ The City of Houston maintains records of all TB diagnoses, and categorizes them as with HIV regardless of AIDS status. Reporting of TB is generally on a timely basis, but information on HIV testing may be, at times, delayed.
- ⚡ Based upon the data presented, the number of people living with HIV/AIDS who are co-infected with TB may be decreasing.

**Table 1.2.7: Persons diagnosed with HIV/AIDS and TB, HSDA, 2004 - 2008**

Year	New HIV/AIDS	New Diagnosis Pulmonary TB	Co-Morbidity Rate
2004	1,780	39	2.2%
2005	1,747	20	1.1%
2006	1,855	15	0.8%
2007	1,853	11	0.6%
2008	1,903	6	0.3%
Source: TX DSHS HARS Data			

**Table 1.2.8: Persons diagnosed with HIV/AIDS and TB, Houston, 2004 - 2008**

Year	New HIV/AIDS	New Diagnosis Pulmonary TB	Co-Morbidity Rate
2004	1,137	41	3.6%
2005	1,146	24	2.1%
2006	1,210	21	1.7%
2007	1,207	11	0.9%
2008	1,289	9	0.7%
Source: Houston Department of Health and Human Services			

## **SPECIAL POPULATIONS**




HRSA has identified special populations that are disproportionately impacted by the HIV epidemic. Both nationally and in the Houston region, these populations have demonstrated increased risk, incidence and/or prevalence. The Houston area has focused on seven of these populations: these include men of color who have sex with men (MCSM), White/Anglo men who have sex with men (WMSM), women of childbearing age, Youth, Blacks/African-Americans, Hispanics/Latinos and rural residents. This section outlines these populations, examining both incidence and prevalence in the HSDA and EMA.

In this section, incidence (new diagnoses) is only reported for the HSDA. This is because differences between EMA and HSDA populations are typically very minimal. Prevalence (living cases) is presented for both the EMA and the HSDA.

### **MEN OF COLOR WHO HAVE SEX WITH MEN** **WHITE MEN WHO HAVE SEX WITH MEN**

For these populations, the mode of transmission is either male sexual contact with men (MSM) or MSM combined with injecting drug use (IDU). HRSA has designated men of color who have sex with men (MCSM) to include all men who are not White/Anglo. Totals may be underrepresented to the extent that MSM may be included among those who have not reported their risk.

A total of 602 new diagnoses of HIV/AIDS in the HSDA were reported in 2008 for MCSM, while 202 new cases were reported for WMSM. Approximately 5,411 living cases of MCSM and 4,207 living cases of WMSM reside in the HSDA. This compares to 5,383 MCSM and 4,184 WMSM residing in the EMA; demographic proportions among the HSDA and EMA are nearly identical.

-  Because the number of new diagnoses among MCSM is much higher than that among WMSM, over time, this will result in an increasingly larger number of MCSM with HIV disease than WMSM in the Houston area.
  - A total of 347 MCSM were newly diagnosed with HIV in 2008, while 111 WMSM were diagnosed.
  - In addition, 255 MCSM were diagnosed with AIDS in 2007 and 91 WMSM received this diagnosis.
-  Among MCSM, Black MSM account for 61% of new HIV cases versus 55% of new AIDS cases. Over time, this could mean an even higher disproportionate impact on the Black/African-American MSM population.
-  Trends in youth aged 13 to 24 reveal an emergence of HIV disease in this age group in the MSM epidemic.

- Youth MCSM account for 38% of new HIV cases (increased from nearly a quarter in 2005) but only 11% of new AIDS cases.
- Furthermore, youth accounted for 14% of living HIV cases and 3% of prevalent AIDS cases. Among WMSM, similar trends can be seen when comparing HIV and AIDS proportions for youth.

**Table 1.2.9: HSDA Incidence of HIV and AIDS among MCSM, 2008**

HSDA	New HIV		New AIDS		New HIV/AIDS	
	#	%	#	%	#	%
<b>Total</b>	347	100.0	255	100.0	602	100.0
<b>Race/Ethnicity</b>						
Black	213	61.4	140	54.9	353	58.6
Hispanic	121	34.9	105	41.2	226	37.5
Other	13	3.7	10	3.9	23	3.8
<b>Age (yrs)</b>						
13-24	133	38.3	27	10.6	160	26.6
25-34	122	35.2	93	36.5	215	35.7
35-44	75	21.6	82	32.2	157	26.1
45-54	15	4.3	44	17.3	59	9.8
55+	2	0.6	9	3.5	11	1.8
<b>Transmission Mode</b>						
MSM	342	98.6	227	89.0	569	94.5
MSM & IDU	5	1.4	28	11.0	33	5.5
<b>Location</b>						
Harris County	331	95.4	240	94.1	571	94.9
Non-Harris County	16	4.6	15	5.9	31	5.1
Data Source: Texas DSHS HARS Data						



**Table 1.2.10: HSDA Prevalence of HIV and AIDS among MCSM, 2008**

HSDA	Living w/ HIV		Living w/ AIDS		Living w/ HIV/AIDS	
	#	%	#	%	#	%
<b>Total</b>	2,183	100.0	3,228	100.0	5,411	100.0
<b>Race/Ethnicity</b>						
Black	1,274	58.4	1,763	54.6	3,037	56.1
Hispanic	849	38.9	1,406	43.6	2,255	41.7
Other	60	2.7	59	1.8	119	2.2
<b>Age (yrs)</b>						
13-24	296	13.6	87	2.7	383	7.1
25-34	698	32.0	507	15.7	1,205	22.3
35-44	695	31.8	1,199	37.1	1,894	35.0
45-54	412	18.9	1,096	34.0	1,508	27.9
55+	82	3.8	339	10.5	421	7.8
<b>Transmission Mode</b>						
MSM	2,008	92.0	2,807	87.0	4,815	89.0
MSM & IDU	175	8.0	421	13.0	596	11.0
<b>Location</b>						
Harris County	2,107	96.5	3,096	95.9	5,203	96.2
Non-Harris County	76	3.5	132	4.1	208	3.8

**Table 1.2.11: EMA Prevalence of HIV and AIDS among MCSM, 2008**

EMA	Living w/ HIV		Living w/ AIDS		Living w/ HIV/AIDS	
	#	%	#	%	#	%
<b>Total</b>	2,174	100.0	3,209	100.0	5,383	100.0
<b>Race/Ethnicity</b>						
Black	1,270	58.4	1,749	54.5	3,019	56.1
Hispanic	844	38.8	1,402	43.7	2,246	41.7
Other	60	2.8	58	1.8	118	2.2
<b>Age (yrs)</b>						
13-24	293	13.5	87	2.7	380	7.1
25-34	694	31.9	504	15.7	1,198	22.3
35-44	693	31.9	1,193	37.2	1,886	35.0
45-54	412	19.0	1,089	33.9	1,501	27.9
55+	82	3.8	336	10.5	418	7.8
<b>Transmission Mode</b>						
MSM	1,999	92.0	2,794	87.1	4,793	89.0
MSM & IDU	175	8.0	415	12.9	590	11.0
<b>Location</b>						
Harris County	2,107	96.9	3,096	96.5	5,203	96.7
Non-Harris County	67	3.1	113	3.5	180	3.3

**Table 1.2.12: HSDA Incidence of HIV and AIDS among White MSM, 2008**

HSDA	New HIV		New AIDS		New HIV/AIDS	
	#	%	#	%	#	%
<b>Total</b>	111	100.0	91	100.0	202	100.0
<b>Age (yrs)</b>						
13-24	19	17.1	3	3.3	22	10.9
25-34	31	27.9	16	17.6	47	23.3
35-44	24	21.6	37	40.7	61	30.2
45-54	27	24.3	19	20.9	46	22.8
55+	10	9.0	16	17.6	26	12.9
<b>Transmission Mode</b>						
MSM	108	97.3	83	91.2	191	94.6
MSM & IDU	3	2.7	8	8.8	11	5.4
<b>Location</b>						
Harris County	106	95.5	83	91.2	189	93.6
Non-Harris County	5	4.5	8	8.8	13	6.4
Data Source: Texas DSHS HARS Data						

**Table 1.2.13: HSDA Prevalence of HIV and AIDS among White MSM, 2008**

HSDA	Living w/ HIV		Living w/ AIDS		Living w/ HIV/AIDS	
	#	%	#	%	#	%
<b>Total</b>	1,527	100.0	2,680	100.0	4,207	100.0
<b>Age (yrs)</b>						
13-24	39	2.6	4	0.1	43	1.0
25-34	255	16.7	114	4.3	369	8.8
35-44	504	33.0	682	25.4	1,186	28.2
45-54	505	33.1	1,222	45.6	1,727	41.1
55+	224	14.7	658	24.6	882	21.0
<b>Transmission Mode</b>						
MSM	1,414	92.6	2,362	88.1	3,776	89.8
MSM & IDU	113	7.4	318	11.9	431	10.2
<b>Location</b>						
Harris County	1,463	95.8	2,528	94.3	3,991	94.9
Non-Harris County	64	4.2	152	5.7	216	5.1
Data Source: Texas DSHS HARS Data						

**Table 1.2.14: EMA Prevalence of HIV and AIDS among White MSM, 2008**

EMA	Living w/ HIV		Living w/ AIDS		Living w/ HIV/AIDS	
	#	%	#	%	#	%
<b>Total</b>	1,519	100.0	2,665	100.0	4,184	100.0
<b>Age (yrs)</b>						
13-24	38	2.5	4	0.2	42	1.0
25-34	254	16.7	114	4.3	368	8.8
35-44	503	33.1	677	25.4	1,180	28.2
45-54	503	33.1	1,217	45.7	1,720	41.1
55+	221	14.5	653	24.5	874	20.9
<b>Transmission Mode</b>						
MSM	1,406	92.6	2,349	88.1	3,755	89.7
MSM & IDU	113	7.4	316	11.9	429	10.3
<b>Location</b>						
Harris County	1,463	96.3	2,528	94.9	3,991	95.4
Non-Harris County	56	3.7	137	5.1	193	4.6
Data Source: Texas DSHS HARS Data						

## **WOMEN OF CHILD BEARING AGE**

HRSA has defined women of childbearing age as those between the ages of 13 and 44. In this population, new HIV and AIDS cases totaled 374 in 2008 in the HSDA, at a rate of 30 cases per 100,000. The number of women of childbearing age living with HIV or AIDS in the HSDA is 3,473 (rate of 277 per 100,000), while the number in the EMA is 3,427 (rate of 281 per 100,000).

- ✚ Black/African-American women comprise the largest percentage of newly diagnosed HIV/AIDS cases (74%) at a rate of 119 per 100,000 as well as the largest proportion of living cases (73%) at a rate of 1,080 per 100,000.
- ✚ For new HIV infections, the incidence rate for Black women is almost 11 times that of White women and 14 times that of Hispanic women.
- ✚ For living cases of women with HIV/AIDS, the prevalence rate for Black women is 12 times that of White women and 10 times that of Hispanic women.
- ✚ Most of these women were infected through heterosexual contact, 50% for new HIV infection and 62% for women living with HIV/AIDS.
- ✚ Harris County contains the majority of all cases: 90% among new diagnoses, 93% among living cases in the HSDA and 94% among living cases in the EMA.
- ✚ Notably, data is showing a possible increase in HIV disease among youth aged 13 to 24: 8% among PLWH are youth while only 2% among PLWA are youth, and the HIV prevalence rate for youth is 74 per 100,000 while the AIDS prevalence rate for youth is only 27 per 100,000.

**Table 1.2.15: HSDA Incidence of HIV and AIDS among Women 13-44, 2008**

HSDA	New HIV			New AIDS			New HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	195	100.0	15.6	179	100.0	14.3	374	100.0	29.9
<b>Race/Ethnicity</b>									
White	24	12.3	5.8	20	11.2	4.9	44	11.8	10.7
Black	145	74.4	62.1	133	74.3	57.0	278	74.3	119.1
Hispanic	23	11.8	4.4	26	14.5	5.0	49	13.1	9.5
<b>Age (yrs)</b>									
13-24	46	23.6	10.1	19	10.6	4.2	65	17.4	14.3
25-34	81	41.5	20.0	85	47.5	21.0	166	44.4	41.0
35-44	68	34.9	17.3	75	41.9	19.1	143	38.2	36.4
<b>Transmission Mode</b>									
IDU	6	3.1	*	19	10.6	*	25	6.7	*
Heterosexual	95	48.7	*	106	59.2	*	201	53.7	*
Perinatal Exposure	0	0.0	*	2	1.1	*	2	0.5	*
NIR/NRR	94	48.2	*	52	29.1	*	146	39.0	*
Other	0	0.0	*	0	0.0	*	0	0.0	*
<b>Location</b>									
Harris County	178	91.3	18.4	159	88.8	16.4	337	90.1	34.8
Non-Harris County	17	8.7	6.0	20	11.2	7.1	37	9.9	13.0
Data Source: Texas DSHS HARS Data									

**Table 1.2.16: HSDA Prevalence of HIV and AIDS among Women 13-44, 2008**






HSDA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	1,829	100.0	146.1	1,644	100.0	131.3	3,473	100.0	277.4
<b>Race/Ethnicity</b>									
White	204	11.2	49.5	161	9.8	39.1	365	10.5	88.6
Black	1,329	72.7	569.3	1,193	72.6	511.0	2,522	72.6	1,080.3
Hispanic	270	14.8	52.2	274	16.7	52.9	544	15.7	105.1
<b>Age (yrs)</b>									
13-24	225	12.3	49.5	98	6.0	21.6	323	9.3	71.1
25-34	834	45.6	206.1	544	33.1	134.4	1,378	39.7	340.5
35-44	770	42.1	196.0	1,002	60.9	255.1	1,772	51.0	451.1
<b>Transmission Mode</b>									
IDU	163	8.9	*	263	16.0	*	426	12.3	*
Heterosexual	1,090	59.6	*	1,058	64.4	*	2,148	61.8	*
Perinatal Exposure	28	1.5	*	40	2.4	*	68	2.0	*
NIR/NRR	546	29.9	*	280	17.0	*	826	23.8	*
Other	2	0.1	*	3	0.2	*	5	0.1	*
<b>Location</b>									
Harris County	1,689	92.3	174.4	1,546	94.0	159.6	3,235	93.1	334.0
Non-Harris County	140	7.7	49.4	98	6.0	34.6	238	6.9	83.9
Data Source: Texas DSHS HARS Data									

**Table 1.2.17: EMA Prevalence of HIV and AIDS among Women 13-44, 2008**

EMA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	1,798	100.0	147.3	1,629	100.0	133.5	3,427	100.0	280.8
<b>Race/Ethnicity</b>									
White	200	11.1	50.7	157	9.6	39.8	357	10.4	90.5
Black	1,310	72.9	575.4	1,185	72.7	520.5	2,495	72.8	1,096.0
Hispanic	263	14.6	51.6	271	16.6	53.2	534	15.6	104.9
<b>Age (yrs)</b>									
13-24	219	12.2	49.7	96	5.9	21.8	315	9.2	71.5
25-34	817	45.4	206.7	539	33.1	136.3	1,356	39.6	343.0
35-44	762	42.4	198.2	994	61.0	258.5	1,756	51.2	456.7
<b>Transmission Mode</b>									
IDU	162	9.0	*	261	16.0	*	423	12.3	*
Heterosexual	1,078	60.0	*	1,052	64.6	*	2,130	62.2	*
Perinatal Exposure	28	1.6	*	39	2.4	*	67	2.0	*
NIR/NRR	528	29.4	*	274	16.8	*	802	23.4	*
Other	2	0.1	*	3	0.2	*	5	0.1	*
<b>Location</b>									
Harris County	1,689	93.9	174.4	1,546	94.9	159.6	3,235	94.4	334.0
Non-Harris County	109	6.1	43.3	83	5.1	33.0	192	5.6	76.2
Data Source: Texas DSHS HARS Data									

## YOUTH

HRSA has defined youth as young people between the ages of 13 and 24 years. The HSDA had a total of 300 newly diagnosed cases of HIV/AIDS in 2008. For living cases, the HSDA had 954 cases, only 17 more youth living with HIV/AIDS than the EMA, so the information presented applies to youth in both geographic areas.

-  Black/African-American youth are disproportionately affected by HIV and AIDS, accounting for 71% of new diagnoses among youth, and comprising 69% of youth living with HIV/AIDS. This compares to 10% of living cases for White youth and 21% for Hispanic youth. The incidence rates show that Black youth are 11 times more likely than White youth to be infected with HIV and seven times more likely than Hispanic youth to be infected with HIV. Similar rate comparisons exist for youth living with HIV/AIDS.
-  Noteworthy is that the HIV infection rate among male youth (40 per 100,000) is four times greater than the infection rate for female youth.
-  Among youth, sexual contact is the typical transmission mode.
  - Nearly 62% new HIV infections were attributed to the risk category of MSM (increased from 54% in 2007), and 14% were attributed to heterosexual contact. This compares to 44% reporting the risk of MSM among all newly infected PLWHA in the HSDA.
  - For those living with HIV/AIDS, 43% reported MSM (up from 37% in 2007), while 21% reported heterosexual risk as the mode of transmission.
-  Approximately 92% of HIV/AIDS diagnoses and prevalent HIV/AIDS cases were among Harris County youth.
-  Based on HIV/AIDS prevalence data for the general population, data is showing a possible increase in HIV disease among youth: 8% among PLWH are youth while only 2% among PLWA are youth, and the HIV prevalence rate for youth is 74 per 100,000 while the AIDS prevalence rate for youth is only 27 per 100,000.

**Table 1.2.18: HSDA Incidence of HIV and AIDS among Youth 13-24, 2008**

HSDA	New HIV			New AIDS			New HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	239	100.0	25.3	61	100.0	6.5	300	100.0	31.8
<b>Gender</b>									
Male	193	80.8	39.5	42	68.9	8.6	235	78.3	48.0
Female	46	19.2	10.1	19	31.1	4.2	65	21.7	14.3
<b>Race/Ethnicity</b>									
White	25	10.5	8.1	4	6.6	1.3	29	9.7	9.4
Black	166	69.5	87.8	46	75.4	24.3	212	70.7	112.2
Hispanic	46	19.2	11.8	11	18.0	2.8	57	19.0	14.7
<b>Transmission Mode</b>									
MSM	148	61.9	*	29	47.5	*	177	59.0	*
IDU	2	0.8	*	3	4.9	*	5	1.7	*
MSM & IDU	4	1.7	*	1	1.6	*	5	1.7	*
Heterosexual	33	13.8	*	9	14.8	*	42	14.0	*
Perinatal Exposure	0	0.0	*	4	6.6	*	4	1.3	*
NIR/NRR	52	21.8	*	15	24.6	*	67	22.3	*
Other	0	0.0	*	0	0.0	*	0	0.0	*
<b>Location</b>									
Harris County	224	93.7	32.3	52	85.2	7.5	276	92.0	39.8
Non-Harris County	15	6.3	6.0	9	14.8	3.6	24	8.0	9.6

**Table 1.2.19: HSDA Prevalence of HIV and AIDS among Youth 13-24, 2008**

HSDA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	701	100.0	74.3	253	100.0	26.8	954	100.0	101.1
<b>Gender</b>									
Male	476	67.9	97.3	155	61.3	31.7	631	66.1	129.0
Female	225	32.1	49.5	98	38.7	21.6	323	33.9	71.1
<b>Race/Ethnicity</b>									
White	79	11.3	25.5	13	5.1	4.2	92	9.6	29.7
Black	482	68.8	255.0	178	70.4	94.2	660	69.2	349.2
Hispanic	136	19.4	35.0	61	24.1	15.7	197	20.6	50.7
<b>Transmission Mode</b>									
MSM	326	46.5	*	87	34.4	*	413	43.3	*
IDU	13	1.9	*	7	2.8	*	20	2.1	*
MSM & IDU	9	1.3	*	4	1.6	*	13	1.4	*
Heterosexual	149	21.3	*	48	19.0	*	197	20.6	*
Perinatal Exposure	64	9.1	*	66	26.1	*	130	13.6	*
NIR/NRR	139	19.8	*	39	15.4	*	178	18.7	*
Other	1	0.1	*	2	0.8	*	3	0.3	*
<b>Location</b>									
Harris County	652	93.0	94.0	228	90.1	32.9	880	92.2	126.9
Non-Harris County	49	7.0	19.6	25	9.9	10.0	74	7.8	29.6



**Table 1.2.20: EMA Prevalence of HIV and AIDS among Youth 13-24, 2008**

EMA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	689	100.0	75.6	248	100.0	27.2	937	100.0	102.9
<b>Gender</b>									
Male	470	68.2	99.9	152	61.3	32.3	622	66.4	132.2
Female	219	31.8	49.7	96	38.7	21.8	315	33.6	71.5
<b>Race/Ethnicity</b>									
White	77	11.2	26.3	12	4.8	4.1	89	9.5	30.4
Black	478	69.4	261.8	175	70.6	95.8	653	69.7	357.6
Hispanic	130	18.9	34.2	60	24.2	15.8	190	20.3	50.0
<b>Transmission Mode</b>									
MSM	322	46.7	*	87	35.1	*	409	43.6	*
IDU	13	1.9	*	6	2.4	*	19	2.0	*
MSM & IDU	9	1.3	*	4	1.6	*	13	1.4	*
Heterosexual	143	20.8	*	47	19.0	*	190	20.3	*
Perinatal Exposure	64	9.3	*	64	25.8	*	128	13.7	*
NIR/NRR	137	19.9	*	38	15.3	*	175	18.7	*
Other	1	0.1	*	2	0.8	*	3	0.3	*
<b>Location</b>									
Harris County	652	94.6	94.0	228	91.9	32.9	880	93.9	126.9
Non-Harris County	37	5.4	17.0	20	8.1	9.2	57	6.1	26.2
Data Source: Texas DSHS HARS Data									

## **BLACKS/AFRICAN-AMERICANS**

In 2008, a total of 1,082 Blacks/African-Americans were newly diagnosed with HIV or AIDS in the Houston HSDA. For those living with HIV/AIDS in 2008, 4,500 cases were living with HIV, while 5,381 were living with AIDS, a total of 9,881 (rate of 1,078 per 100,000) in the HSDA. In the EMA, 9,803 Blacks/African-Americans were living with HIV/AIDS.

Please note that surveillance data are gathered for Blacks without national distinction. While it can be assumed that most of these Blacks are African-Americans, surveillance data do not differentiate between African-Americans, Africans, Caribbean-Africans, etc.

- ⓧ Among Black PLWHA, Women are approximately 41% of those living with HIV, but they are only 36% of those living with AIDS, so there may be an increasing trend for Black women with HIV disease.
- ⓧ Noteworthy is that when compared to overall incidence in the HSDA, women comprised 31% of newly diagnosed HIV cases among the Black population, while women accounted for only 25% of new HIV cases in the overall HSDA population. Likewise, women comprised 38% of living HIV/AIDS cases among Black PLWHA, while women accounted for only 27% of all living cases in the HSDA. This data all suggest that Black women are disproportionately affected by the epidemic.
- ⓧ Data show a possible increasing trend among Black youth living with HIV/AIDS. Black Youth aged 13 to 24 comprised 10% of living HIV cases, but only accounted for 3% of living AIDS cases.
- ⓧ Among Blacks/African-Americans with newly diagnosed HIV or AIDS, 30% were attributed to male-to-male sex, and 28% were attributed to heterosexual contact. Risk was not reported for 39% new HIV diagnoses and 23% of new AIDS diagnoses.
- ⓧ Interestingly, when compared to overall HSDA rates, Black PLWHA had significantly lower percentages of MSM risk: Black PLWHA with new diagnoses had 30% of cases reported under the mode of MSM, while overall HSDA incidence data reported 40% MSM. For prevalent cases, Black PLWHA reported 27% MSM, while overall HSDA prevalence data reported 43%. This trend is possibly due to the increasing proportions of female PLWHA among the Black population.
- ⓧ Harris County is home to almost 93% of African-Americans diagnosed with HIV or AIDS in 2008, down from 95% in 2007. This data suggests a continuing trend of HIV/AIDS cases in the rural counties.

**Table 1.2.21: HSDA Incidence of HIV and AIDS  
among Blacks/African-Americans, 2008**

HSDA	New HIV			New AIDS			New HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	598	100.0	65.2	484	100.0	52.8	1,082	100.0	118.0
<b>Gender</b>									
Male	412	68.9	94.5	295	61.0	67.6	707	65.3	162.1
Female	186	31.1	38.7	189	39.0	39.3	375	34.7	78.0
<b>Age (yrs)</b>									
0-1	1	0.2	3.5	0	0.0	0.0	1	0.1	3.5
2-12	1	0.2	0.7	0	0.0	0.0	1	0.1	0.7
13-24	166	27.8	87.8	46	9.5	24.3	212	19.6	112.2
25-34	183	30.6	145.0	142	29.3	112.5	325	30.0	257.6
35-44	140	23.4	105.9	145	30.0	109.7	285	26.3	215.5
45-54	78	13.0	56.5	112	23.1	81.1	190	17.6	137.5
55+	29	4.8	19.1	39	8.1	25.7	68	6.3	44.8
<b>Transmission Mode</b>									
MSM	209	34.9	*	119	24.6	*	328	30.3	*
IDU	14	2.3	*	62	12.8	*	76	7.0	*
MSM & IDU	4	0.7	*	21	4.3	*	25	2.3	*
Heterosexual	136	22.7	*	168	34.7	*	304	28.1	*
Perinatal Exposure	1	0.2	*	3	0.6	*	4	0.4	*
NIR/NRR	234	39.1	*	111	22.9	*	345	31.9	*
Other	0	0.2	*	0	0.0	*	0	0.0	*
<b>Location</b>									
Harris County	560	93.6	76.6	444	91.7	60.7	1,004	92.8	137.4
Non-Harris County	38	6.4	20.4	40	8.3	21.5	78	7.2	41.9
Data Source: Texas DSHS HARS Data									

**Table 1.2.22: HSDA Prevalence of HIV and AIDS among Blacks/African-Americans, 2008**

HSDA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	4,500	100.0	490.7	5,381	100.0	586.8	9,881	100.0	1,077.5
<b>Gender</b>									
Male	2,655	59.0	608.8	3,428	63.7	786.1	6,083	61.6	1,395.0
Female	1,845	41.0	383.6	1,953	36.3	406.0	3,798	38.4	789.6
<b>Age (yrs)</b>									
0-1	2	0.0	7.1	1	0.0	3.5	3	0.0	10.6
2-12	62	1.4	40.9	5	0.1	3.3	67	0.7	44.2
13-24	482	10.7	255.0	178	3.3	94.2	660	6.7	349.2
25-34	1,264	28.1	1,001.8	859	16.0	680.8	2,123	21.5	1,682.6
35-44	1,342	29.8	1,014.9	1,785	33.2	1,349.9	3,127	31.6	2,364.8
45-54	969	21.5	701.5	1,741	32.4	1,260.4	2,710	27.4	1,961.8
55+	379	8.4	249.8	812	15.1	535.1	1,191	12.1	784.9
<b>Transmission Mode</b>									
MSM	1,157	25.7	*	1,460	27.1	*	2,617	26.5	*
IDU	451	10.0	*	931	17.3	*	1,382	14.0	*
MSM & IDU	117	2.6	*	303	5.6	*	420	4.3	*
Heterosexual	1,454	32.3	*	1,845	34.3	*	3,299	33.4	*
Perinatal Exposure	105	2.3	*	54	1.0	*	159	1.6	*
NIR/NRR	1,210	26.9	*	784	14.6	*	1,994	20.2	*
Other	6	0.1	*	4	0.1	*	10	0.1	*
<b>Location</b>									
Harris County	4,271	94.9	584.4	5,103	94.8	698.2	9,374	94.9	1,282.5
Non-Harris County	229	5.1	123.0	278	5.2	149.3	507	5.1	272.3
Data Source: Texas DSHS HARS Data									

**Table 1.2.23: EMA Prevalence of HIV and AIDS among Blacks/African-Americans, 2008**

EMA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	4,462	100.0	501.7	5,341	100.0	600.5	9,803	100.0	1,102.1
<b>Gender</b>									
Male	2,640	59.2	627.7	3,401	63.7	808.7	6,041	61.6	1,436.4
Female	1,822	40.8	388.6	1,940	36.3	413.8	3,762	38.4	802.3
<b>Age (yrs)</b>									
0-1	2	0.0	7.2	1	0.0	3.6	3	0.0	10.9
2-12	62	1.4	42.0	5	0.1	3.4	67	0.7	45.3
13-24	478	10.7	261.8	175	3.3	95.8	653	6.7	357.6
25-34	1,246	27.9	1,027.2	853	16.0	703.2	2,099	21.4	1,730.4
35-44	1,334	29.9	1,038.0	1,776	33.3	1,382.0	3,110	31.7	2,420.0
45-54	963	21.6	715.6	1,726	32.3	1,282.5	2,689	27.4	1,998.1
55+	377	8.4	256.4	805	15.1	547.4	1,182	12.1	803.8
<b>Transmission Mode</b>									
MSM	1,153	25.8	*	1,452	27.2	*	2,605	26.6	*
IDU	450	10.1	*	921	17.2	*	1,371	14.0	*
MSM & IDU	117	2.6	*	297	5.6	*	414	4.2	*
Heterosexual	1,444	32.4	*	1,840	34.5	*	3,284	33.5	*
Perinatal Exposure	105	2.4	*	54	1.0	*	159	1.6	*
NIR/NRR	1,187	26.6	*	773	14.5	*	1,960	20.0	*
Other	6	0.1	*	4	0.1	*	10	0.1	*
<b>Location</b>									
Harris County	4,271	95.7	584.4	5,103	95.5	698.2	9,374	95.6	1,282.5
Non-Harris County	191	4.3	120.5	238	4.5	150.1	429	4.4	270.6
Data Source: Texas DSHS HARS Data									

## HISPANICS/LATINOS

In 2008, a total of 435 Hispanics/Latinos were newly diagnosed with HIV or AIDS in the Houston HSDA, at a rate of 23 per 100,000. Among those living with HIV/AIDS, 4,284 were Hispanic in the HSDA, at a rate of 223 per 100,000, while 4,253 were Hispanic in the EMA, at a rate of 226 per 100,000.

- Ⓜ Hispanic men were infected with HIV at a rate of over six times that of women (19 per 100,000 versus 3 per 100,000). This comparison represents an increase from a four-fold difference in 2007. Additionally, when compared to the general HSDA population, Hispanic men are disproportionately infected by HIV: 87% of new HIV infections were men among Hispanic PLWHA, while 75% of new HIV diagnoses were men in the general population. Similarly, 81% of living HIV/AIDS cases among Hispanic PLWHA were men, while 73% of prevalent cases were men in the general population.
- Ⓜ As with other populations, adult PLWHA had the highest proportions, but infections among Hispanic youth are increasing. While 8% of Hispanics living with HIV were youth, only 2% of Hispanics living with AIDS were youth. This compares to 21% youth among Hispanics newly infected with HIV.
- Ⓜ Among Hispanics newly diagnosed with HIV, 54% were attributed to the mode of MSM, while 44% reported MSM risk among newly diagnosed PLWHA in the HSDA.
- Ⓜ Harris County is home to 95% of Hispanics/Latinos living with HIV or AIDS.

**Table 1.2.24: HSDA Incidence of HIV and AIDS among Hispanics/Latinos, 2008**

HSDA	New HIV			New AIDS			New HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	221	100.0	11.5	214	100.0	11.1	435	100.0	22.6
<b>Gender</b>									
Male	193	87.3	19.2	177	82.7	17.6	370	85.1	36.9
Female	28	12.7	3.1	37	17.3	4.0	65	14.9	7.1
<b>Age (yrs)</b>									
0-1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
2-12	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
13-24	46	20.8	11.8	11	5.1	2.8	57	13.1	14.7
25-34	83	37.6	19.8	82	38.3	19.5	165	37.9	39.3
35-44	66	29.9	21.9	73	34.1	24.2	139	32.0	46.1
45-54	22	10.0	11.9	35	16.4	18.9	57	13.1	30.7
55+	4	1.8	2.5	13	6.1	8.3	17	3.9	10.8
<b>Transmission Mode</b>									
MSM	120	54.3	*	99	46.3	*	219	50.3	*
IDU	3	1.4	*	10	4.7	*	13	3.0	*
MSM & IDU	1	0.5	*	6	2.8	*	7	1.6	*
Heterosexual	32	14.5	*	44	20.6	*	76	17.5	*
Perinatal Exposure	0	0.0	*	0	0.0	*	0	0.0	*
NIR/NRR	65	29.4	*	55	25.7	*	120	27.6	*
Other	0	0.0	*	0	0.0	*	0	0.0	*
<b>Location</b>									
Harris County	210	95.0	12.6	201	93.9	12.1	411	94.5	24.7
Non-Harris County	11	5.0	4.3	13	6.1	5.1	24	5.5	9.3
Data Source: Texas DSHS HARS Data									

**Table 1.2.25: HSDA Prevalence of HIV and AIDS among Hispanics/Latinos, 2008**

HSDA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	1,627	100.0	84.7	2,657	100.0	138.3	4,284	100.0	223.0
<b>Gender</b>									
Male	1,271	78.1	126.6	2,192	82.5	218.4	3,463	80.8	345.0
Female	356	21.9	38.8	465	17.5	50.7	821	19.2	89.5
<b>Age (yrs)</b>									
0-1	1	0.1	1.1	0	0.0	0.0	1	0.0	1.1
2-12	17	1.0	4.5	5	0.2	1.3	22	0.5	5.8
13-24	136	8.4	35.0	61	2.3	15.7	197	4.6	50.7
25-34	531	32.6	126.4	455	17.1	108.3	986	23.0	234.7
35-44	576	35.4	191.0	1,027	38.7	340.5	1,603	37.4	531.5
45-54	278	17.1	149.9	784	29.5	422.8	1,062	24.8	572.7
55+	88	5.4	56.1	325	12.2	207.1	413	9.6	263.2
<b>Transmission Mode</b>									
MSM	794	48.8	*	1,295	48.7	*	2,089	48.8	*
IDU	46	2.8	*	174	6.5	*	220	5.1	*
MSM & IDU	55	3.4	*	111	4.2	*	166	3.9	*
Heterosexual	361	22.2	*	691	26.0	*	1,052	24.6	*
Perinatal Exposure	26	1.6	*	20	0.8	*	46	1.1	*
NIR/NRR	343	21.1	*	356	13.4	*	699	16.3	*
Other	2	0.1	*	10	0.4	*	12	0.3	*
<b>Location</b>									
Harris County	1,536	94.4	92.3	2,530	95.2	152.0	4,066	94.9	244.3
Non-Harris County	91	5.6	35.4	127	4.8	49.4	218	5.1	84.8
Data Source: Texas DSHS HARS Data									






**Table 1.2.26: EMA Prevalence of HIV and AIDS among Hispanics/Latinos, 2008**

EMA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	1,612	100.0	85.5	2,641	100.0	140.1	4,253	100.0	225.6
<b>Gender</b>									
Male	1,265	78.5	128.6	2,181	82.6	221.8	3,446	81.0	350.4
Female	347	21.5	38.5	460	17.4	51.0	807	19.0	89.5
<b>Age (yrs)</b>									
0-1	1	0.1	1.1	0	0.0	0.0	1	0.0	1.1
2-12	17	1.1	4.6	5	0.2	1.3	22	0.5	5.9
13-24	130	8.1	34.2	60	2.3	15.8	190	4.5	50.0
25-34	526	32.6	127.2	453	17.2	109.5	979	23.0	236.7
35-44	574	35.6	193.7	1,020	38.6	344.2	1,594	37.5	537.9
45-54	277	17.2	152.6	781	29.6	430.2	1,058	24.9	582.8
55+	87	5.4	56.9	322	12.2	210.6	409	9.6	267.5
<b>Transmission Mode</b>									
MSM	789	48.9	*	1,291	48.9	*	2,080	48.9	*
IDU	46	2.9	*	173	6.6	*	219	5.1	*
MSM & IDU	55	3.4	*	111	4.2	*	166	3.9	*
Heterosexual	357	22.1	*	686	26.0	*	1,043	24.5	*
Perinatal Exposure	26	1.6	*	19	0.7	*	45	1.1	*
NIR/NRR	337	20.9	*	351	13.3	*	688	16.2	*
Other	2	0.1	*	10	0.4	*	12	0.3	*
<b>Location</b>									
Harris County	1,536	95.3	92.3	2,530	95.8	152.0	4,066	95.6	244.3
Non-Harris County	76	4.7	34.5	111	4.2	50.3	187	4.4	84.8
Data Source: Texas DSHS HARS Data									

## RURAL COUNTIES

There has been recent data to show that more HIV/AIDS cases are being reported in the more rural areas of the Houston region. In this section, the rural counties (non-Harris County) of the HSDA are examined. In 2008, there were 156 new HIV/AIDS cases in the rural counties of the HSDA, at a rate of 12 per 100,000, up from 10 the previous year. A total of 1,232 persons were living with HIV/AIDS in the HSDA compared to 1,066 PLWHA in the EMA.

-  Women accounted for 35% of new HIV infections in the rural counties, compared to 27% women among newly infected individuals in the HSDA, showing that women are disproportionately affected by HIV disease in rural areas.
-  There are higher proportions of White PLWHA in the rural counties when compared to the overall HSDA epidemic: For new HIV infections, 32% were White PLWHA in the rural areas while 18% were White among all newly diagnosed with HIV the overall HSDA population; among prevalent cases, 40% were White PLWHA in the rural counties compared to 29% White PLWHA in the overall HSDA population.
-  Approximately 30% of those newly diagnosed with HIV in the rural counties were infected via heterosexual risk factor, significantly higher than the 19% reported by the newly infected in the overall HSDA. Please note that among rural PLWHA, approximately 34% did not classify their transmission risk, while only 17%-20% of other populations of living cases remain unclassified in the HSDA. This underreporting of transmission risk limits the accuracy of the true picture of risk behavior.

**Table 1.2.27: HSDA Incidence of HIV and AIDS among Rural Counties, 2008**

HSDA	New HIV			New AIDS			New HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	76	100.0	6.0	80	100.0	6.3	156	100.0	12.3
<b>Gender</b>									
Male	50	65.8	7.9	52	65.0	8.2	102	65.4	16.0
Female	26	34.2	4.1	28	35.0	4.4	54	34.6	8.6
<b>Race/Ethnicity</b>									
White	24	31.6	3.3	25	31.3	3.4	49	31.4	6.6
Black	38	50.0	20.4	40	50.0	21.5	78	50.0	41.9
Hispanic	11	14.5	4.3	13	16.3	5.1	24	15.4	9.3
Other	3	3.9	3.5	2	2.5	2.3	5	3.2	5.8
<b>Age (yrs)</b>									
0-1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
2-12	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
13-24	15	19.7	6.0	9	11.3	3.6	24	15.4	9.6
25-34	21	27.6	15.1	20	25.0	14.4	41	26.3	29.4
35-44	24	31.6	12.6	25	31.3	13.2	49	31.4	25.8
45-54	8	10.5	3.7	15	18.8	7.0	23	14.7	10.8
55+	8	10.5	3.2	11	13.8	4.4	19	12.2	7.6
<b>Transmission Mode</b>									
MSM	20	26.3	*	19	23.8	*	39	25.0	*
IDU	1	1.3	*	7	8.8	*	8	5.1	*
MSM & IDU	1	1.3	*	4	5.0	*	5	3.2	*
Heterosexual	23	30.3	*	19	23.8	*	42	26.9	*
Perinatal Exposure	0	0.0	*	1	1.3	*	1	0.6	*
NIR/NRR	31	40.8	*	30	37.5	*	61	39.1	*
Other	0	0.0	*	0	0.0	*	0	0.0	*
Data Source: Texas DSHS HARS Data									

**Table 1.2.28: HSDA Prevalence of HIV and AIDS among Rural Counties, 2008**

HSDA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	519	100.0	41.0	713	100.0	56.3	1,232	100.0	97.2
<b>Gender</b>									
Male	316	60.9	49.6	544	76.3	85.5	860	69.8	135.1
Female	203	39.1	32.2	169	23.7	26.8	372	30.2	59.0
<b>Race/Ethnicity</b>									
White	189	36.4	25.6	298	41.8	40.4	487	39.5	66.1
Black	229	44.1	123.0	278	39.0	149.3	507	41.2	272.3
Hispanic	91	17.5	35.4	127	17.8	49.4	218	17.7	84.8
Other	10	1.9	11.5	10	1.4	11.5	20	1.6	23.1
<b>Age (yrs)</b>									
0-1	1	0.2	3.0	0	0.0	0.0	1	0.1	3.0
2-12	6	1.2	3.2	0	0.0	0.0	6	0.5	3.2
13-24	49	9.4	19.6	25	3.5	10.0	74	6.0	29.6
25-34	132	25.4	94.8	83	11.6	59.6	215	17.5	154.4
35-44	158	30.4	83.3	218	30.6	114.9	376	30.5	198.2
45-54	117	22.5	54.8	248	34.8	116.2	365	29.6	171.0
55+	56	10.8	22.3	139	19.5	55.3	195	15.8	77.6
<b>Transmission Mode</b>									
MSM	127	24.5	*	252	35.3	*	379	30.8	*
IDU	31	6.0	*	68	9.5	*	99	8.0	*
MSM & IDU	13	2.5	*	32	4.5	*	45	3.7	*
Heterosexual	122	23.5	*	151	21.2	*	273	22.2	*
Perinatal Exposure	9	1.7	*	6	0.8	*	15	1.2	*
NIR/NRR	215	41.4	*	201	28.2	*	416	33.8	*
Other	2	0.4	*	3	0.4	*	5	0.4	*
Data Source: Texas DSHS HARS Data									

**Table 1.2.29: EMA Prevalence of HIV and AIDS among Rural Counties, 2008**

EMA	Living w/ HIV			Living w/ AIDS			Living w/ HIV/AIDS		
	#	%	Rate	#	%	Rate	#	%	Rate
<b>Total</b>	445	100.0	40.1	621	100.0	55.9	1066	100.0	96.0
<b>Gender</b>									
Male	282	63.4	51.0	479	77.1	86.6	761	71.4	137.5
Female	163	36.6	29.2	142	22.9	25.5	305	28.6	54.7
<b>Race/Ethnicity</b>									
White	170	38.2	26.3	263	42.4	40.7	433	40.6	67.0
Black	191	42.9	120.5	238	38.3	150.1	429	40.2	270.6
Hispanic	76	17.1	34.5	111	17.9	50.3	187	17.5	84.8
Other	8	1.8	9.4	9	1.4	10.6	17	1.6	19.9
<b>Age (yrs)</b>									
0-1	1	0.2	3.4	0	0.0	0.0	1	0.1	3.4
2-12	6	1.3	3.5	0	0.0	0.0	6	0.6	3.5
13-24	37	8.3	17.0	20	3.2	9.2	57	5.3	26.2
25-34	106	23.8	90.5	72	11.6	61.5	178	16.7	152.0
35-44	141	31.7	83.0	191	30.8	112.4	332	31.1	195.5
45-54	104	23.4	54.0	219	35.3	113.8	323	30.3	167.8
55+	50	11.2	23.3	119	19.2	55.5	169	15.9	78.8
<b>Transmission Mode</b>									
MSM	110	24.7	*	226	36.4	*	336	31.5	*
IDU	30	6.7	*	52	8.4	*	82	7.7	*
MSM & IDU	13	2.9	*	24	3.9	*	37	3.5	*
Heterosexual	104	23.4	*	136	21.9	*	240	22.5	*
Perinatal Exposure	9	2.0	*	4	0.6	*	13	1.2	*
NIR/NRR	177	39.8	*	176	28.3	*	353	33.1	*
Other	2	0.4	*	3	0.5	*	5	0.5	*
Data Source: Texas DSHS HARS Data									

## **QUESTION 1.3:**



**WHAT ARE THE INDICATORS OF RISK  
FOR HIV/AIDS INFECTION IN THE  
HOUSTON AREA?**

## **WHAT ARE THE INDICATORS OF RISK FOR HIV/AIDS INFECTION IN THE HOUSTON AREA?**




The previous chapter described the distribution and trends of HIV infection and AIDS diagnoses throughout the Houston HSDA and EMA. The purpose of this chapter is to examine available data on risk behaviors and markers in the Houston EMA from two perspectives: 1) Factors that affect the risk of acquiring HIV infection among HIV-negative persons (STDs, HIV testing), and; 2) Factors that affect the risk of transmitting HIV infection among HIV-positive persons (MSMs, injection drug users, heterosexuals).

### **SUMMARY**



#### **Gonorrhea Trends:**

-  Overall, the number of gonorrhea cases in both the Houston HSDA and in Harris County has been declining over recent years. Breakdowns by sex show similar trends in reported gonorrhea cases for the Houston HSDA.
-  From 2002 to 2003, all HSDA counties outside of Harris reported decreases in gonorrhea cases except for Chambers county, which reported a slight increase. The number of cases in Austin and Wharton counties remained approximately the same.

#### **Syphilis Trends:**

-  Unlike gonorrhea, the number of reported syphilis cases in the Houston HSDA has been steadily increasing. The number of syphilis cases in 2003 is twice that reported in 1999.
  - The Houston Department of Health and Human Services Bureau of Epidemiology reported a syphilis outbreak among MSM in Houston during 2005.
-  However, Harris County is the only HSDA county experiencing such an increase. All other counties have experienced a decrease or leveling of reported syphilis cases.
-  A breakdown by sex shows that the increase in syphilis cases is most significant among males. Between 1999 and 2003, the number of syphilis cases among males has tripled; among women, the number of cases has decreased by almost half.

#### **HIV Testing:**

-  In 2003, a total of 29,827 HIV tests were reported for the Houston HSDA.
-  The vast majority of HIV tests reported to the State's HIV Counseling and Testing system were confidential, and conducted during field visits or at HIV Testing Sites.

- In terms of HIV exposure categories, “non-targeted” constituted the majority of HIV tests, followed by female-to-male sex, male-to-male sex and injection drug users.

### **STD TRENDS: GONORRHEA**

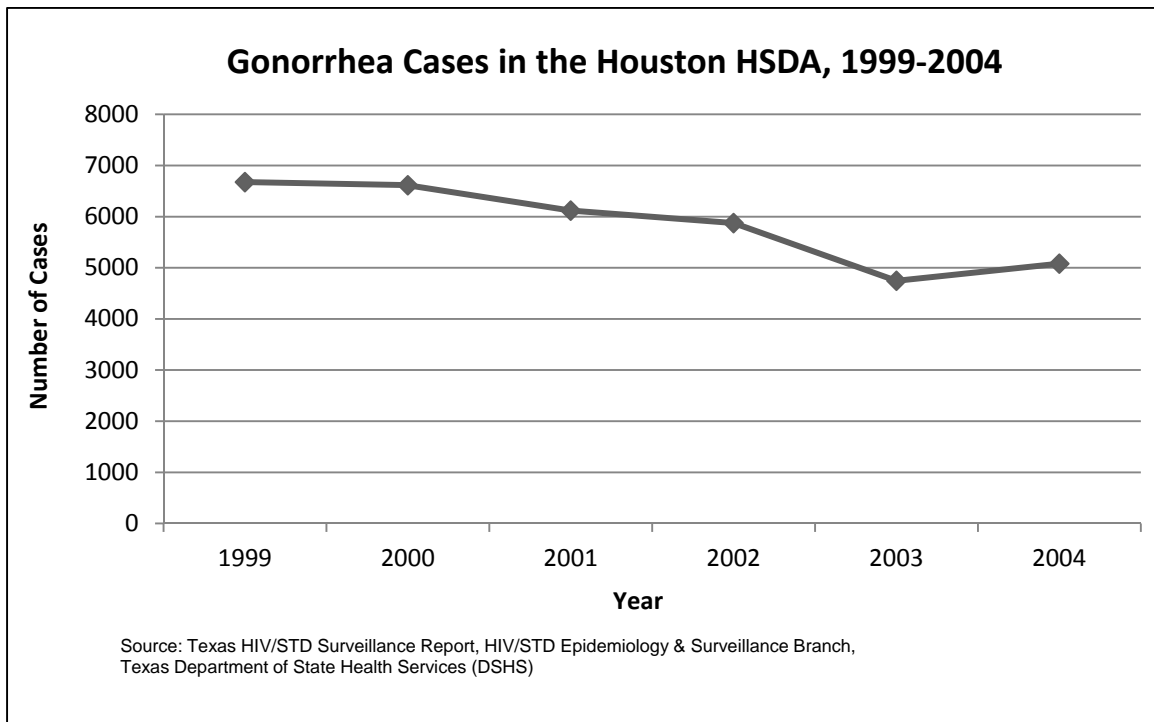
- Overall, the number of gonorrhea cases in both the Houston HSDA and in Harris County has been declining over the past 5 years.
- From 2002 to 2004, all but two HSDA counties reported decreases in gonorrhea cases. Compared to 2003, Colorado County reported an increase of 3 new cases, and Harris County reported an increase of 413.

**Table 1.3.1: Gonorrhea Cases by Year and County, 1999-2004**

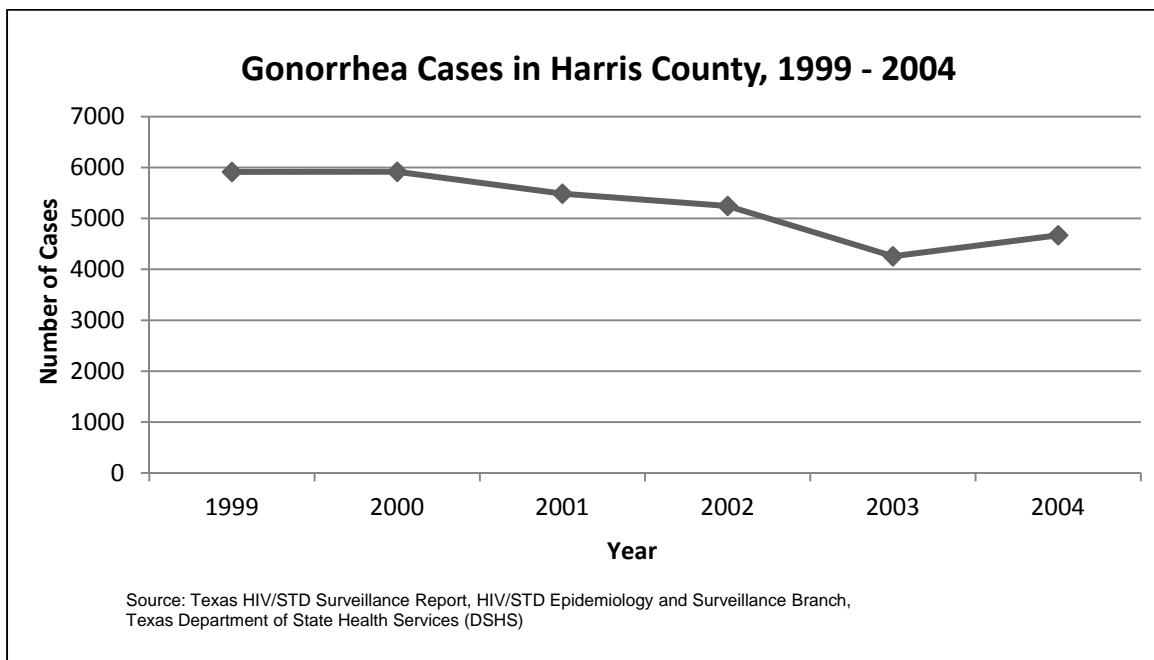
HSDA	1999	2000	2001	2002	2003	2004
Austin	16	14	4	9	9	5
Chambers	6	2	8	11	16	15
Colorado	21	11	21	27	13	16
Fort Bend	219	208	166	178	145	131
Harris	5,914	5,917	5,486	5,246	4,257	4,670
Liberty	63	45	57	80	52	61
Montgomery	143	155	135	137	105	81
Walker	68	100	95	71	41	26
Waller	126	107	85	64	56	52
Wharton	99	55	61	51	51	23
<b>Total</b>	<b>6,675</b>	<b>6,614</b>	<b>6,118</b>	<b>5,874</b>	<b>4,745</b>	<b>5,080</b>



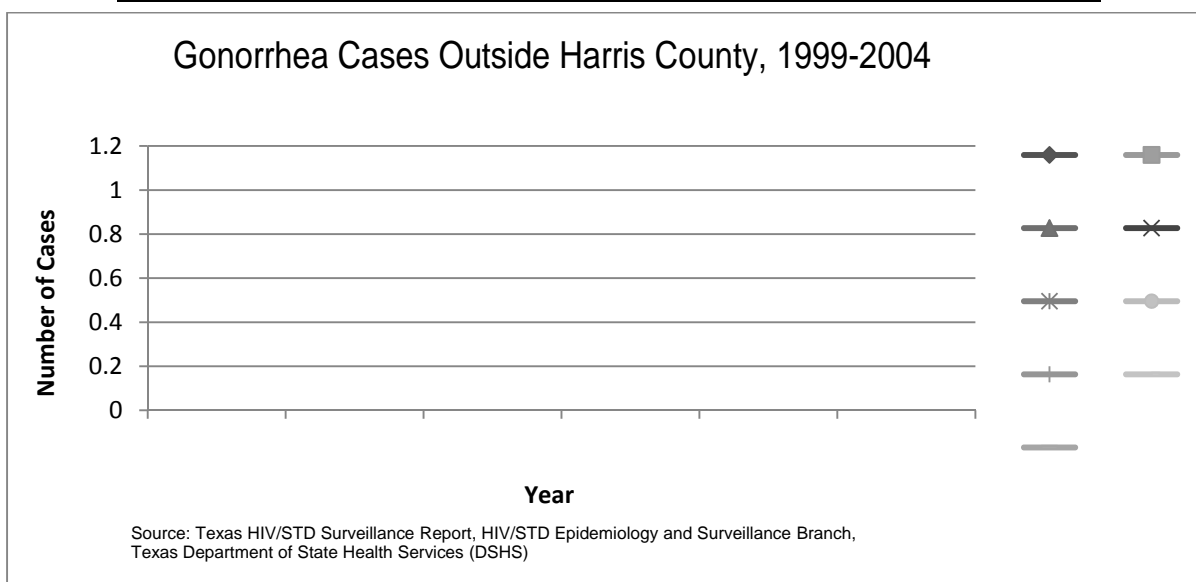
**Figure 1.3.1: Gonorrhea Cases in the Houston HSDA, 1999-2004**



**Figure 1.3.2: Gonorrhea Cases in Harris County, 1999-2004**



**Figure 1.3.3: Gonorrhea Cases Outside Harris County, 1999-2004**

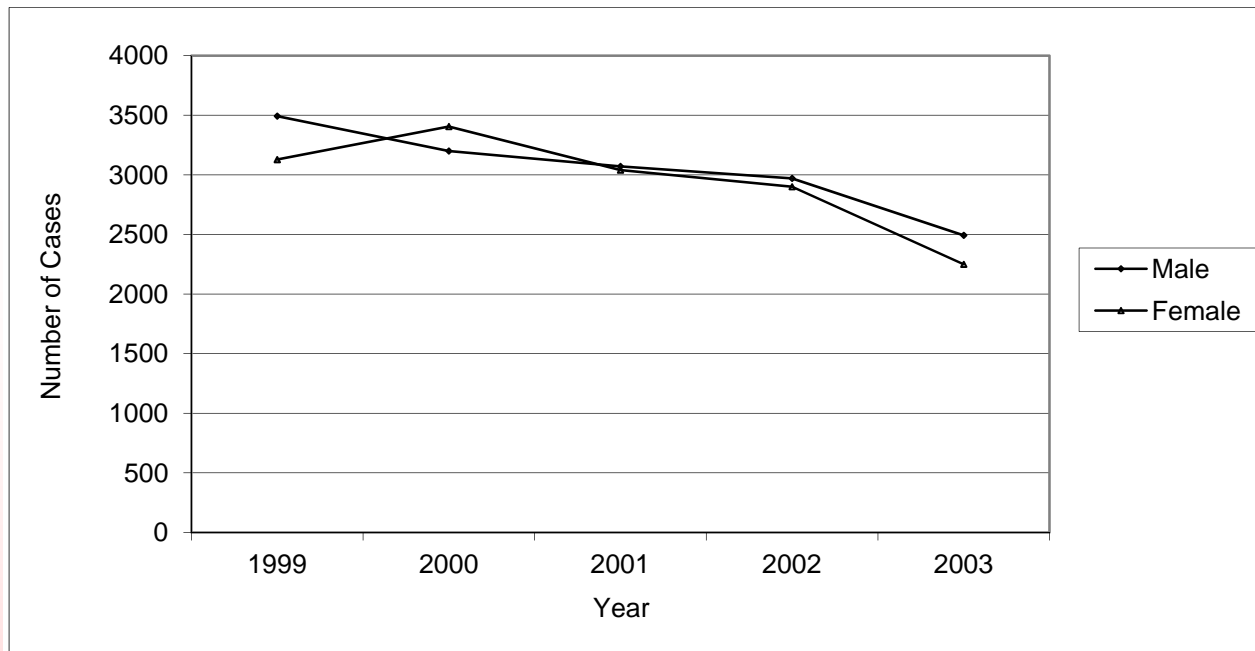


**Table 1.3.2: Gonorrhea cases by Year, Sex and County, 1999-2003**

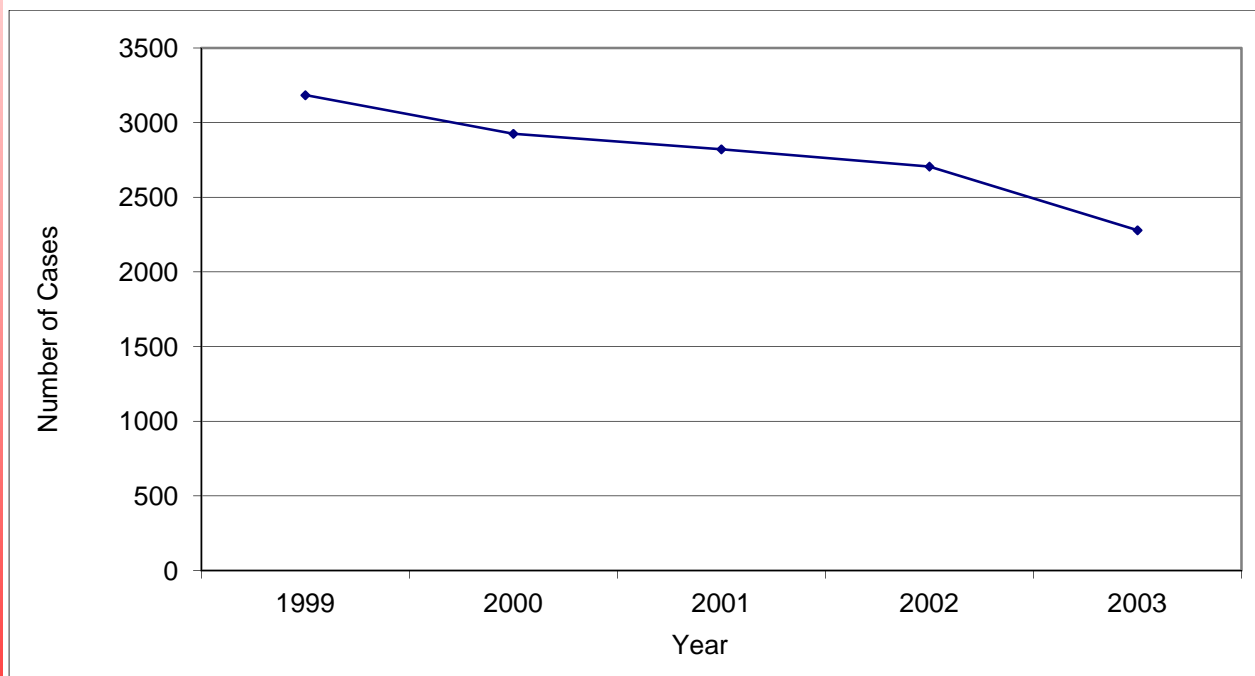
HSDA	1999		2000		2001		2002		2003	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>Austin</b>	3	13	5	9			2	7	5	4
<b>Chambers</b>					7	1	8	3	10	6
<b>Colorado</b>	9	12	6	5	11	10	10	17	7	6
<b>Fort Bend</b>	95	122	84	123	64	102	86	92	69	76
<b>Harris</b>	3,184	2,682	2,925	2,988	2,821	2,659	2,706	2,536	2,279	1,978
<b>Liberty</b>	29	34	17	28	26	31	23	57	18	34
<b>Montgomery</b>	48	95	51	103	52	83	56	81	48	57
<b>Walker</b>	29	37	41	58	42	52	28	43	18	23
<b>Waller</b>	62	62	48	57	31	54	32	32	17	36
<b>Wharton</b>	30	69	22	33	17	44	19	32	22	29
<b>Total</b>	<b>3,493</b>	<b>3,128</b>	<b>3,200</b>	<b>3,405</b>	<b>3,071</b>	<b>3,040</b>	<b>2,970</b>	<b>2,900</b>	<b>2,493</b>	<b>2,249</b>

\* Grayed out cells have had the demographic breakdowns suppressed due to small cell sizes.

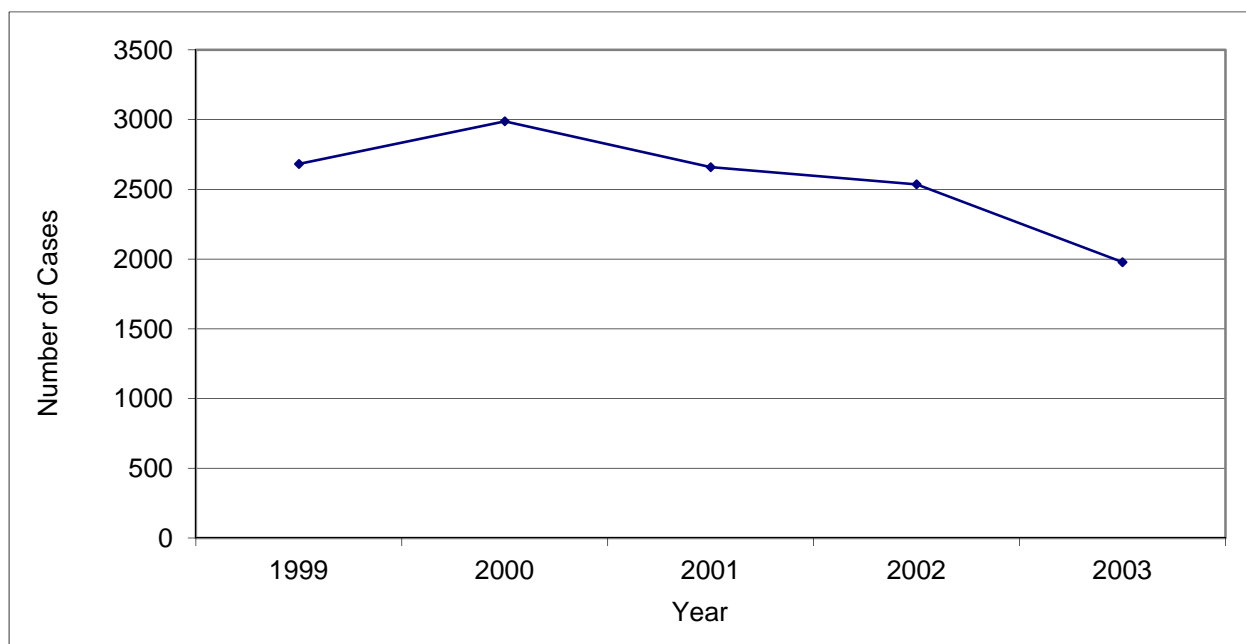
**Figure 1.3.4: Gonorrhea Cases in the Houston HSDA, By Sex, 1999-2003**



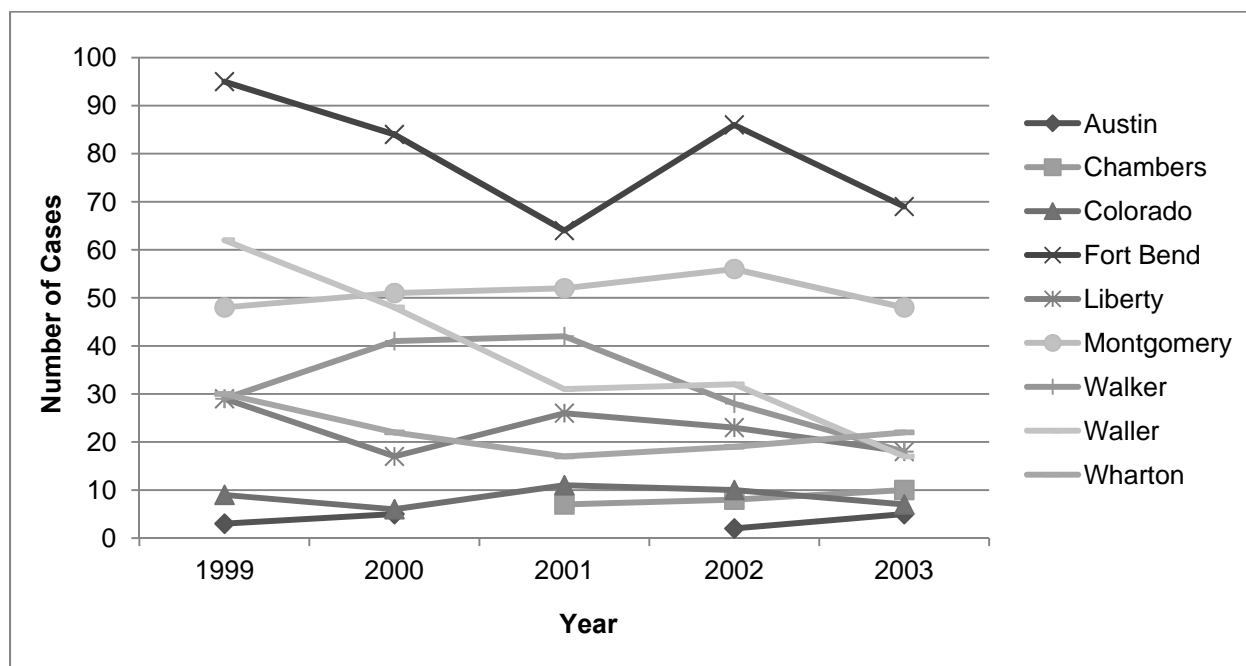
**Figure 1.3.5: Gonorrhea Cases in Harris County, Male, 1999-2003**



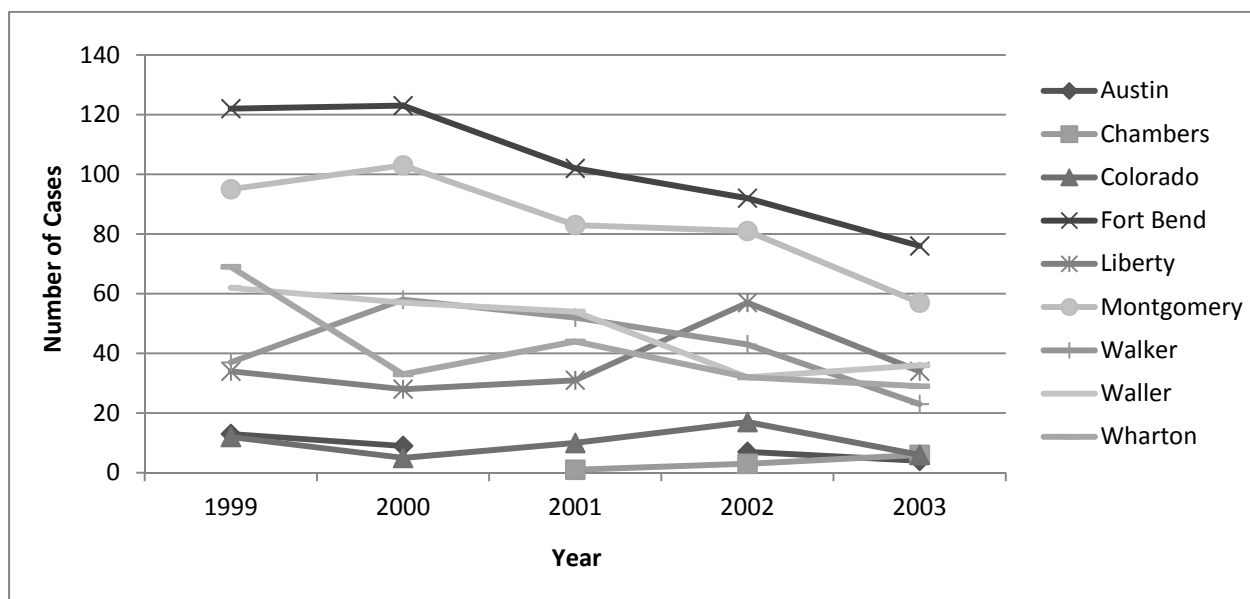
**Figure 1.3.6: Gonorrhea Cases in Harris County, Female, 1999-2003**



**Figure 1.3.7: Gonorrhea Cases Outside Harris County, Male, 1999-2003**



**Figure 1.3.8: Gonorrhea Cases Outside Harris County, Female, 1999-2003**



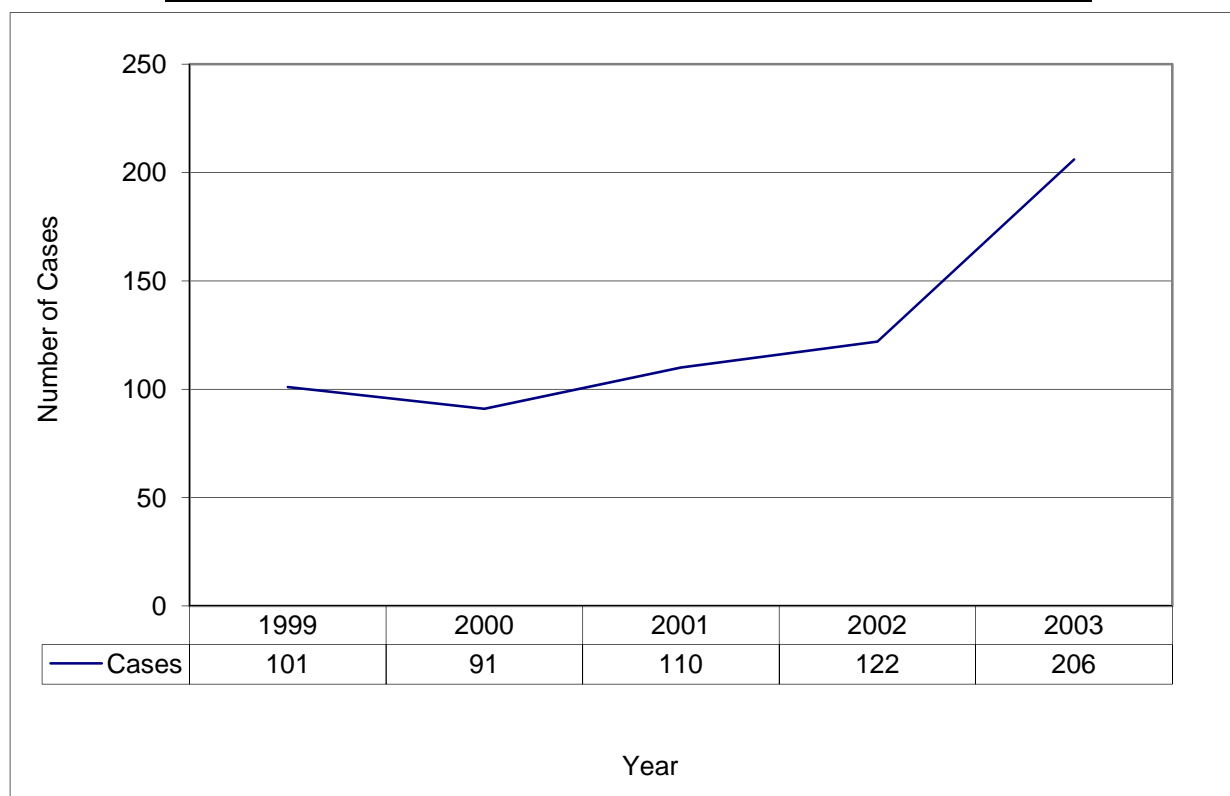
### **STD TRENDS: SYPHILIS**

- ⚡ Although lower in prevalence than gonorrhea, the number of reported syphilis cases in the Houston HSDA has been increasing. The number of cases in 2004 has almost doubled that of 2002.
- ⚡ A breakdown by sex shows that the increase in syphilis cases is significant among males. Between 1999 and 2003, the number of syphilis cases among males has tripled; among women, the number of cases has decreased by almost half. Again, this trend is limited to Harris County – however, for some of the HSDA counties outside of Harris, the sex of cases was sometimes unknown.

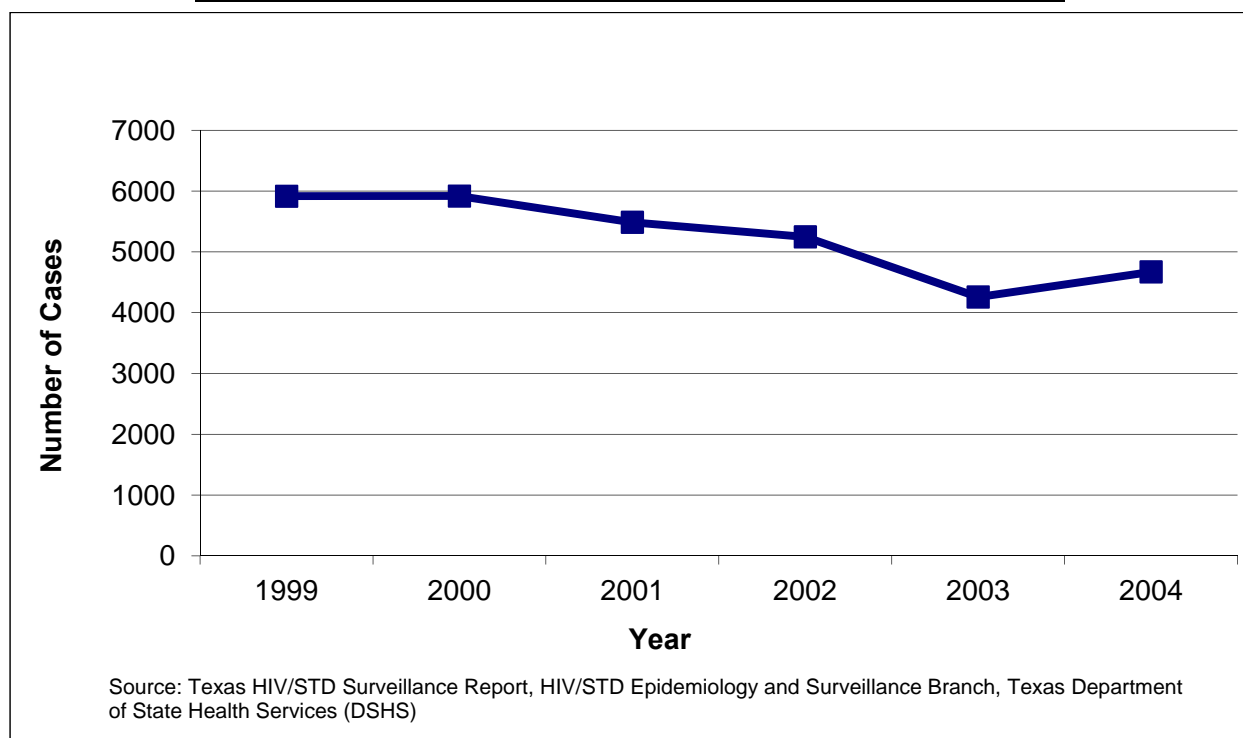
**Table 1.3.3: Syphilis Cases by Year and County, 1999-2004**

HSDA	1999	2000	2001	2002	2003	2004
Austin	0	1	0	0	0	0
Chambers	0	0	0	0	0	0
Colorado	2	0	1	0	0	0
Fort Bend	21	14	6	7	9	6
Harris	70	70	101	111	193	213
Liberty	0	1	1	2	2	5
Montgomery	2	1	0	2	2	3
Walker	1	0	0	0	0	0
Waller	0	2	0	0	0	0
Wharton	5	2	1	0	0	0
<b>Total</b>	<b>101</b>	<b>91</b>	<b>110</b>	<b>122</b>	<b>206</b>	<b>227</b>
Source: The Texas Department of State Health Services						

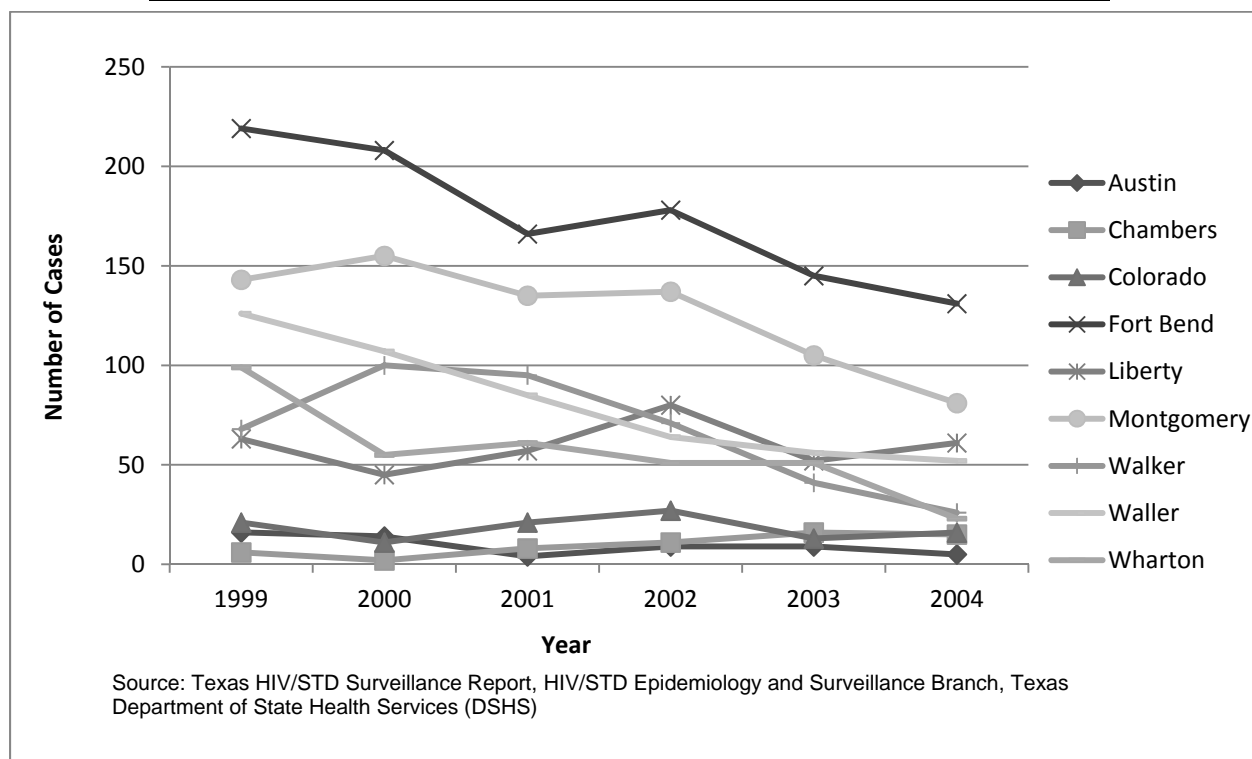
**Figure 1.3.9: Syphilis Cases In the Houston HSDA, 1999-2003**



**Figure 1.3.10: Syphilis Cases In Harris County, 1999-2004**



**Figure 1.3.11: Syphilis Cases Outside Harris County, 1999-2004**

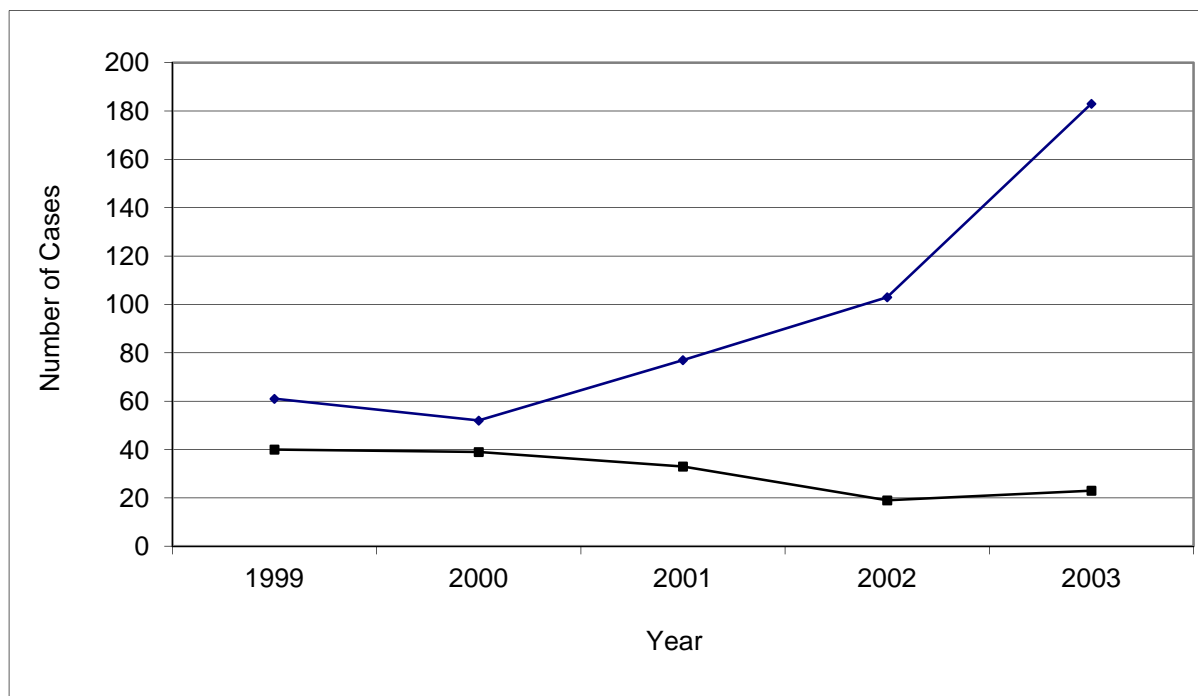


**Table 1.3.4: Syphilis cases by Year, Sex and County, 1999-2003**

HSDA	1999		2000		2001		2002		2003	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Austin	0	0			0	0	0	0	0	0
Chambers	0	0	0	0	0	0	0	0	0	0
Colorado			0	0			0	0	0	0
Fort Bend	13	8	5	9					4	5
Harris	44	26	43	27	73	28	95	16	176	17
Liberty	0	0								
Montgomery					0	0				
Walker			0	0	0	0	0	0	0	0
Waller	0	0			0	0	0	0	0	0
Wharton							0	0	0	0
<b>Total</b>	<b>61</b>	<b>40</b>	<b>52</b>	<b>39</b>	<b>77</b>	<b>33</b>	<b>103</b>	<b>19</b>	<b>183</b>	<b>23</b>

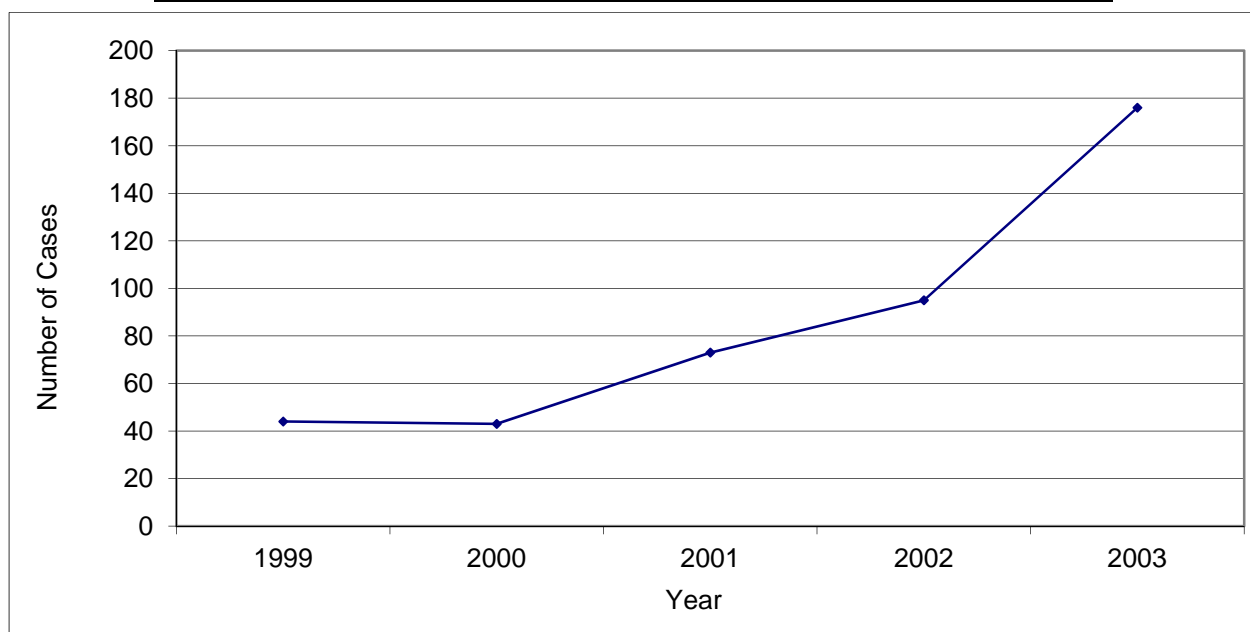
\* Grayed out cells have had the demographic breakdowns suppressed due to small cell sizes.

**Figure 1.3.12: Syphilis Cases In the Houston HSDA, by Sex, 1999-2003**

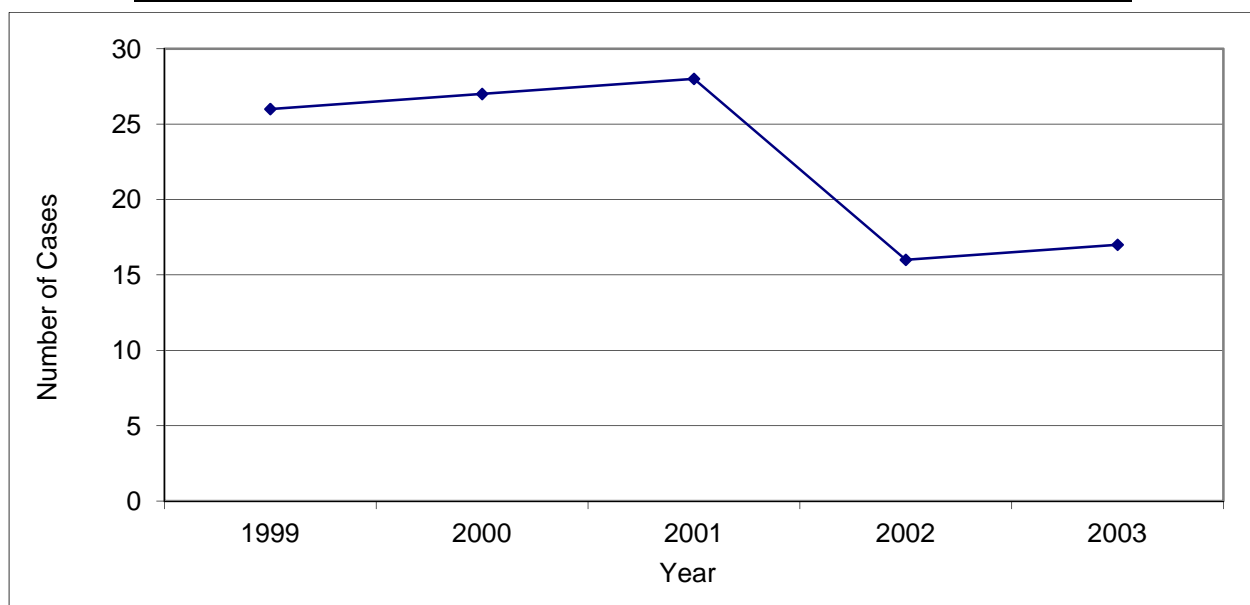




**Figure 1.3.13: Syphilis Cases In Harris County, Male, 1999-2003**



**Figure 1.3.14: Syphilis Cases In Harris County, Female, 1999-2003**



The Houston Department of Health and Human Services Bureau of Epidemiology reported a syphilis outbreak among MSM in Houston during 2006.

Surveillance of syphilis is focused on primary and secondary (P&S) syphilis because these are the stages in which syphilis is infectious, and because it signals recent infection with syphilis. Syphilis is one of several infectious diseases that are reportable in the state of Texas. When a person tests positive for syphilis, a report is submitted to the Texas Department of State Health Services (DSHS). Reports are then forwarded to the local jurisdiction for follow-up, which includes notification, treatment, and interview for partner elicitation and notification. Syphilis case follow-up in Houston and Harris County is carried out by the HDHHS Bureau of HIV/STD and Viral Hepatitis Prevention.

From January 1, 2007 through October 31, 2007, there were 393 confirmed cases of P&S syphilis. Of the 393 cases, 376 (96%) were interviewed. Of those interviewed; 122 (32%) were HIV positive, 154 (41%) were HIV negative, 39 (10%) were of unknown HIV status, and 61 (16%) had not been tested for HIV.

**Table 1.3.5: HIV Status among all Interviewed Syphilis Clients, Houston/Harris County, 01/01/07 - 10/31/07**

# Cases	# Interviewed	Current HIV Status			
		Positive	Negative	Unknown	No Test
393	376 (96%)	122 (32%)	154 (41%)	39 (10%)	61 (16%)
Source: Houston Department of Health and Human Services, Bureau of Epidemiology					

Due to a 2005 outbreak of syphilis among MSM in Houston, the HDHHS Bureau of Epidemiology performed additional analyses on this subpopulation.

From January 1, 2007 through October 31, 2007, there were 180 confirmed cases of P&S syphilis among MSM. Of these cases, 179 (99%) were interviewed. Of those interviewed; 99 (55%) were HIV positive, 53 (30%) were HIV negative, 8 (4%) were of unknown HIV status, and 21 (12%) had not been tested for HIV.

**Table 1.3.6: HIV Status among Interviewed MSM Syphilis Clients Houston/Harris County, 01/01/07 - 10/31/07**

# Cases	# Interviewed	Current HIV Status			
		Positive	Negative	Unknown	No Test
180	179 (99%)	99 (55%)	53 (30%)	8 (4%)	21 (12%)
Source: Houston Department of Health and Human Services, Bureau of Epidemiology					

## HIV TESTING

Data on HIV testing patterns can provide information that is helpful in focusing HIV counseling and testing programs. The data may also be used to help identify potential gaps in HIV surveillance data, which represents only persons who have been tested for HIV. For HIV/AIDS Prevention and Care Planning, HIV counseling and testing data were obtained from the Counseling and Testing System at the Texas Department of State Health Services (DSHS). These data represent the only available data for HIV counseling and testing in the Houston HSDA.

- ⚡ In 2003, a total of 29,827 HIV tests were reported for the Houston HSDA.
- ⚡ For the city of Houston, 11,407 individuals received HIV Counseling, Testing and Referral (CTR) services through programs funded by the Houston Department of Health and Human Services in 2006.
  - The number tested decreased from 2005 to 2006 due to the introduction of Protocol Based Counseling (PBC), which incorporates a counseling session tailored to the reported risk of the client. The session requires about 45 minutes per HIV test performed.
  - This change moved the focus of HIV testing from quantity to quality of services. Fewer clients were tested, but the testing was more appropriately targeted, which is evident in the increase in HIV positivity rate from 1.6% to 2.2%.
- ⚡ The vast majority of HIV tests reported to the state's HIV counseling and testing system were confidential and conducted during field visits or at HIV testing sites.
- ⚡ In terms of HIV exposure categories, "non-targeted" constituted the majority of HIV tests, followed by heterosexual sex, male-to-male sex and injection drug use.

**Table 1.3.7: Number of HIV tests reported, by Sex and County, 2003**

HSDA	Male	Female	TOTAL
<b>Austin</b>	8	6	<b>14</b>
<b>Chambers</b>	7	10	<b>17</b>
<b>Colorado</b>	11	2	<b>13</b>
<b>Fort Bend</b>	188	210	<b>398</b>
<b>Harris</b>	16,966	11,760	<b>28,726</b>
<b>Liberty</b>	16	12	<b>28</b>
<b>Montgomery</b>	209	167	<b>376</b>
<b>Walker</b>	97	108	<b>205</b>
<b>Waller</b>	21	12	<b>33</b>
<b>Wharton</b>	13	4	<b>17</b>
<b>TOTAL</b>	<b>17,536</b>	<b>12,291</b>	<b>29,827</b>

**Table 1.3.8: Number of HIV Tests Reported, by Test Type and County, 2003**

HSDA	HIV test type		TOTAL
	Anonymous	Confidential	
Austin	1	12	13
Chambers	1	13	14
Colorado	1	12	13
Fort Bend	74	308	382
Harris	2,666	25,790	28,456
Liberty	0	28	28
Montgomery	21	349	370
Walker	3	198	201
Waller	3	30	33
Wharton	3	13	16
<b>TOTAL</b>	<b>2,773</b>	<b>26,753</b>	<b>29,526</b>

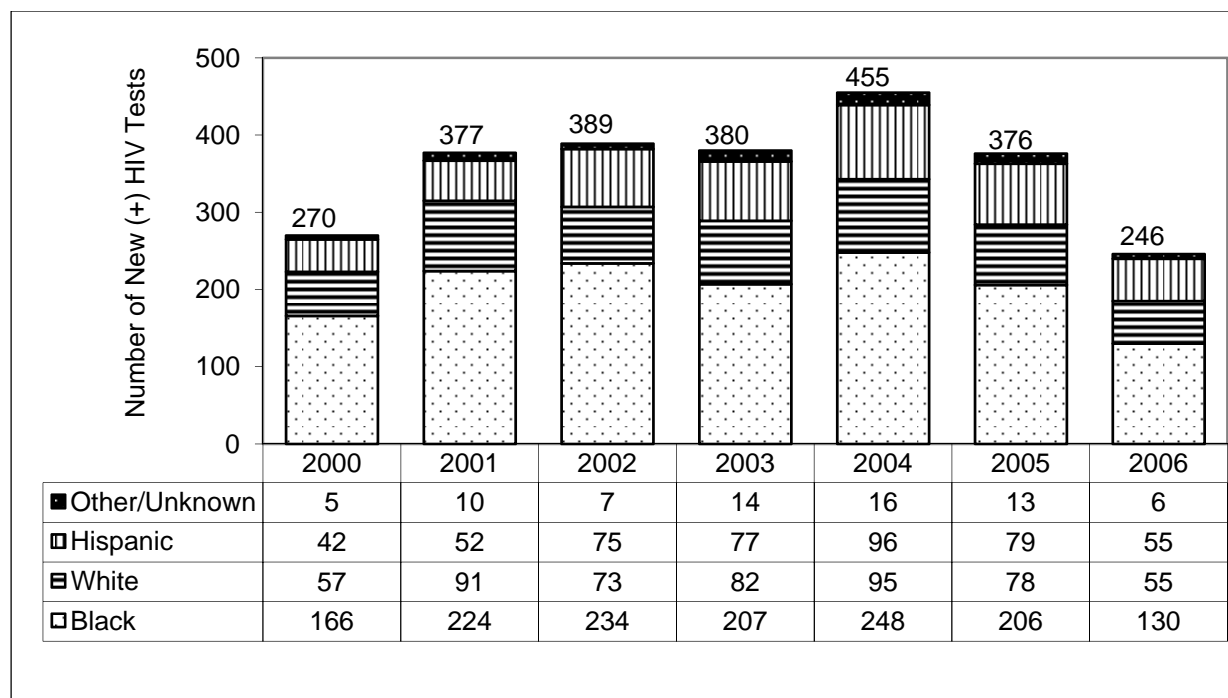
**Table 1.3.9: Number of HIV Tests Reported, by HIV Exposure Category and County, 2003**

HSDA	MSM/ IDU	MSM	IDU	F/MS	Non- targeted	Total
Austin	0	2	0	9	3	14
Chambers	1	0	4	11	1	17
Colorado	0	2	1	10	0	13
Fort Bend	1	51	23	226	97	398
Harris	286	4,963	1,193	7,145	15,150	28,737
Liberty	0	5	8	13	2	28
Montgomery	5	31	156	151	34	377
Walker	1	15	32	153	4	205
Waller	0	5	3	16	9	33
Wharton	0	2	0	11	4	17
<b>TOTAL</b>	<b>294</b>	<b>5,076</b>	<b>1,420</b>	<b>7,745</b>	<b>15,304</b>	<b>29,839</b>

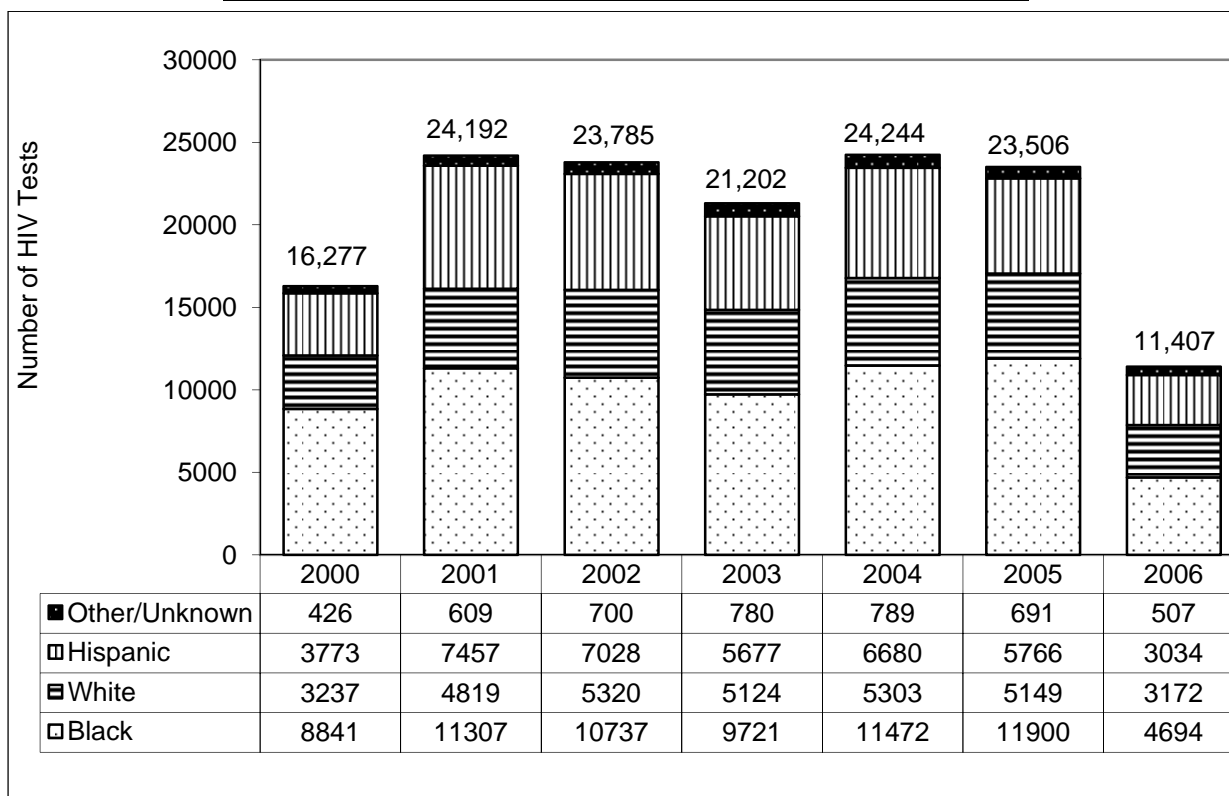
**Table 1.3.10: Number of HIV Tests Reported, by HIV Test Site Type and County, 2003**

HSDA	HIV/CTS Testing Site	STD Clinic	Drug Treatment Facility	Family Planning Clinic	Primary Health Care Facility	Corrections	Field Visit	Education/Other	TOTAL
Austin	6	1	0	2	0	3	2	0	14
Chambers	1	0	6	2	0	4	4	0	17
Colorado	3	0	2	1	0	6	1	0	13
Fort Bend	141	3	16	177	0	19	42	0	398
Harris	5,761	2,587	288	2,863	2,542	4,197	10,384	115	28,737
Liberty	2	0	5	5	0	11	5	0	28
Montgomery	50	1	32	70	0	158	66	0	377
Walker	5	0	12	139	0	44	5	0	205
Waller	12	1	1	5	0	1	13	0	33
Wharton	7	0	4	3	0	3	0	0	17
<b>TOTAL</b>	<b>5,988</b>	<b>2,593</b>	<b>366</b>	<b>3267</b>	<b>2,542</b>	<b>4446</b>	<b>10,522</b>	<b>115</b>	<b>29,839</b>

**Figure 1.3.15: Positive HIV Test Results from Houston DHHS-Funded CTR (Counseling, Testing and Referral) Programs, By Year of Test and Race/Ethnicity, as of August 7, 2007**



**Figure 1.3.16: Total HIV Tests from Houston DHHS-Funded CTR Programs By Year of Test and Race/Ethnicity, as of August 7, 2007**



For the city of Houston, of the 11,407 tested, 4,694 (41%) were Black/African-American, 3,172 (28%) were White/Anglo, 3,034 (26%) were Hispanic/Latino, and 507 (4%) were of other or unknown race/ethnicity.

Of the 11,407 clients tested, 246 (2%) were newly diagnosed with HIV. Of those who were newly diagnosed; 130 (53%) were Black/African-American, 55 (22%) were White/Anglo, 55 (22%) were Hispanic/Latino, and 6 (2%) were of other or unknown race/ethnicity.

## **QUESTION 2.1:**

**WHAT ARE THE PATTERNS OF  
UTILIZATION OF HIV SERVICES OF  
PEOPLE LIVING IN THE HOUSTON  
REGION?**

## **WHAT ARE THE PATTERNS OF UTILIZATION OF HIV SERVICES OF PEOPLE LIVING IN THE HOUSTON REGION?**

Data were obtained from the Centralized Patient Care Data Management System (CPCDMS) operated by the Ryan White Part A Program for all services except primary care and drug assistance. CPCDMS data does not track all primary care data (VA tracks their own) and does not track medication usage data. Those data elements were obtained via data requests to those specific parties, and were included if available (notations are indicated in associated tables).



CPCDMS was established for data collection in 2000 and identifies unduplicated patients for providers funded by Parts A, B, C and D. It requires initial client registration with annual updates for re-enrollment. The initial registration requests detailed information on, among other things, risk factors and co-morbidities. This information is not necessarily updated during re-enrollment. Data presented on transmission mode and subpopulations is generally based on responses provided at initial registration.

Primary care data used only CPCDMS data in 2001 and 2002. In 2003, however, this data was expanded with patient profiles from Parts C and D, the Harris County Jail and the Veterans Administration. Since then, CPCDMS has incorporated jail data, Part C and most of Part D. For 2007 - 2009, additional primary care data was obtained from Part D and the VA.



### **SUMMARY**

Utilization patterns on primary medical care, case management, dental care, mental health therapy/counseling and Texas HIV Medication Program services are compared to surveillance data on those living with HIV disease. *Please note that the most current epidemic data for this report is 2008 data from DSHS HARS, while service utilization data from the CPCDMS is from 2009.*

#### **PRIMARY MEDICAL CARE:**

-  White PLWHA are under-represented in primary medical care services.
-  Primary care is accessed proportionately by PLWHA of all ages and both genders.

#### **CASE MANAGEMENT:**

-  White PLWHA are under-represented in case management, while Black PLWHA account for a higher proportion of clients than the regional epidemic.
-  Overall, case management utilization is proportional by age and gender.



### **DENTAL CARE:**

- ⓧ There is a disproportionately higher access of dental care by older adults.
- ⓧ Black/African-American PLWHA are under-utilizing dental services, while Hispanics are slightly overrepresented among those who use dental services.
- ⓧ Data shows an increase in representation among rural clients accessing dental services.

### **MENTAL HEALTH THERAPY AND COUNSELING:**

- ⓧ White PLWHA account for a higher proportion among those utilizing services when compared to their proportion among the epidemic. Noteworthy is that White males account for the largest proportion of mental health clients.
- ⓧ Black PLWHA are under-represented among those utilizing mental health services.
- ⓧ From 2007 to 2009, there appears to be more clients reporting the MSM risk behavior accessing services and a decrease of clients reporting heterosexual risk behavior.
- ⓧ Data show more clients from the urban area in 2009.

### **THMP:**

- ⓧ Hispanic PLWHA are over-represented among those accessing THMP services while White PLWHA appear to be under-represented among these clients when compared to their distribution within the regional epidemic.
- ⓧ Usage by gender and age group appear to be proportional when compared to the regional epidemic.

## **PRIMARY CARE SERVICES**

The following data-related issues should be considered when reviewing the primary care utilization data:

- Ⓡ The Veterans Administration (VA) reported patient data to be included in primary care. Among these, 21 males and 1 female died during 2009, 18 males died during 2008 and 20 males died during 2007. These patients are included in the patient counts.
- Ⓡ Because the utilization data do not contain the same level of detail, only gender and race categories contain VA data; the other data are obtained from the CPCDMS only.

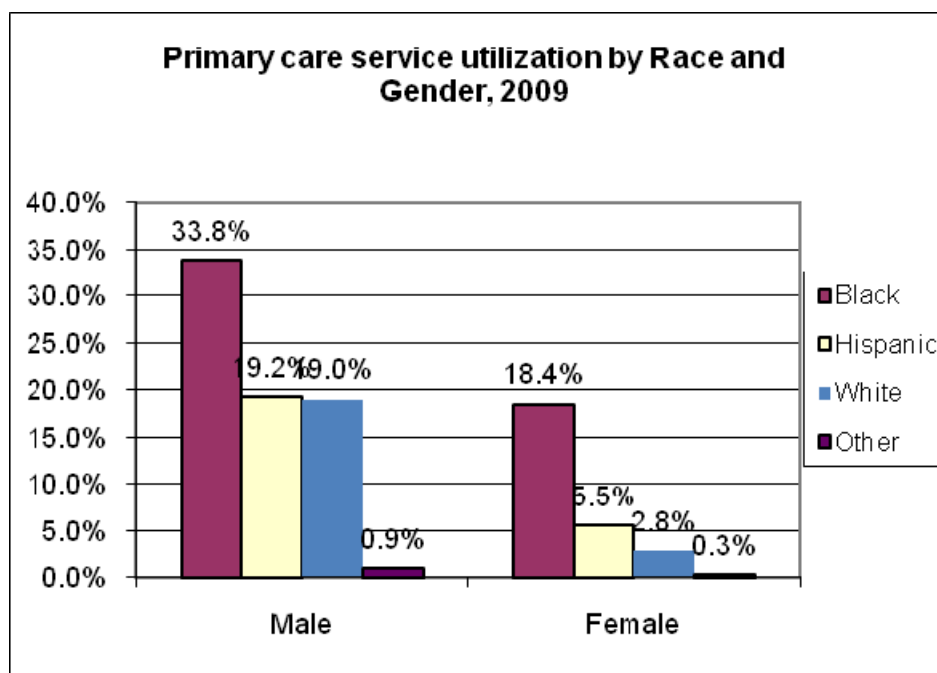
The following compares primary care utilization to surveillance data on those living with HIV disease:

- Ⓡ Medical care services are used proportionately when comparing gender and age groups.
- Ⓡ The percentages of Blacks/African-Americans and Hispanics who use primary medical care services through these funding sources are only slightly different from their percentages among those living with HIV or AIDS. White PLWHA, however, under utilize medical care services.
  - Blacks/African-Americans are 49% of those living with HIV or AIDS and Hispanics are 21%, while these two groups are 52% and 25%, respectively, among those accessing primary medical care.
  - Whites make up 29% of those living with HIV disease but only comprise 22% of those accessing primary medical care services.
- Ⓡ From 2007 through 2009, most of the demographic proportions remained stable. A slight decrease can be seen in the percentage of adults aged 35 to 44 utilizing medical services, from 36% in 2007 to 32% in 2009.

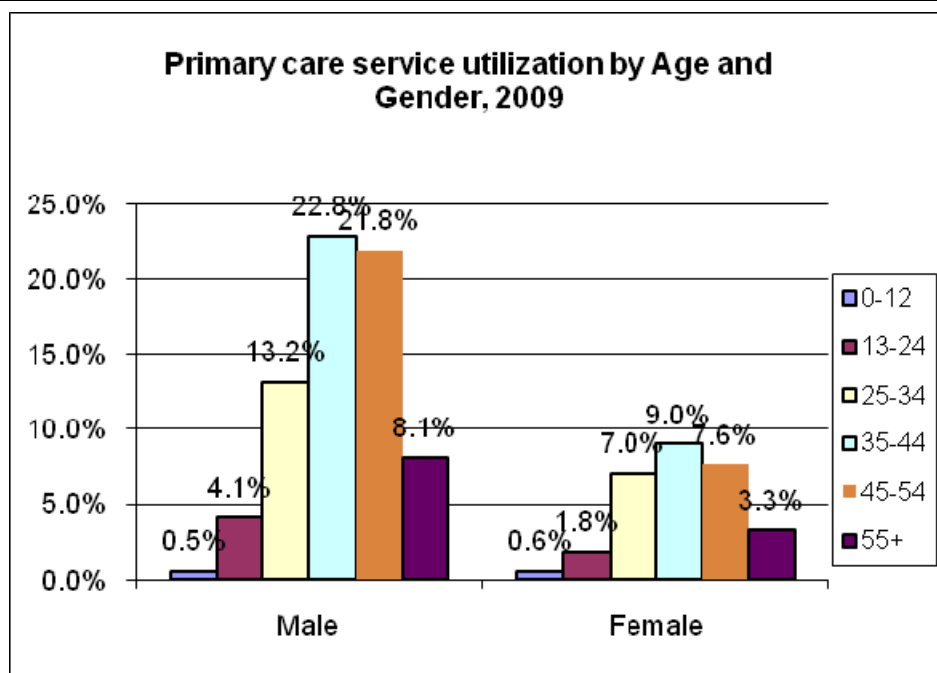
**Table 2.1.1: Primary Care Utilization by Gender, Race and Age, 2009**

	Primary Care					
	Male		Female		Total	
	#	%	#	%	#	%
<b>Total</b>	6,579	73.0%	2,431	27.0%	9,010	100.0%
<b>Race*</b>						
White	1,714	19.0%	250	2.8%	1,964	21.8%
Black***	3,048	33.8%	1,660	18.4%	4,708	52.3%
Hispanic	1,733	19.2%	497	5.5%	2,230	24.8%
Other	84	0.9%	24	0.3%	108	1.2%
<b>Age**</b>						
0-12	45	0.5%	46	0.6%	91	1.1%
13-24	340	4.1%	150	1.8%	490	6.0%
25-34	1,086	13.2%	577	7.0%	1,663	20.2%
35-44	1,879	22.8%	741	9.0%	2,620	31.9%
45-54	1,797	21.8%	627	7.6%	2,424	29.5%
55+	668	8.1%	270	3.3%	938	11.4%
<p>Data source:</p> <p>*CPCDMS and additional VA data</p> <p>**CPCDMS data only</p> <p>***In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."</p>						

**Figure 2.1.1: Primary Care Utilization by Race and Gender, 2009**



**Figure 2.1.2: Primary Care Utilization by Age (in years) and Gender, 2009**



**Table 2.1.2: Primary Care Utilization by Gender, Race and Age, 2007 - 2009**

	Primary Care					
	2007		2008		2009	
	#	%	#	%	#	%
<b>Gender*</b>						
Male	5,823	73.2%	6,990	74.1%	6,579	73.0%
Female	2,128	26.8%	2,446	25.9%	2,431	27.0%
<b>Race*</b>						
White	1,784	22.4%	2,159	22.9%	1,964	21.4%
Black***	4,180	52.6%	5,028	53.3%	4,708	53.3%
Hispanic	1,887	23.7%	2,149	22.8%	2,230	24.2%
Other	100	1.3%	100	1.1%	108	1.1%
<b>Age**</b>						
0-12	97	1.4%	91	1.2%	91	1.1%
13-24	341	4.8%	404	5.4%	490	6.0%
25-34	1,448	20.3%	1,545	20.5%	1,663	20.2%
35-44	2,550	35.7%	2,520	33.4%	2,620	31.9%
45-54	2,031	28.4%	2,178	28.9%	2,424	29.5%
55+	678	9.5%	809	10.7%	938	11.4%
<p>Data source: *CPCDMS and additional VA data</p> <p>**CPCDMS data only</p> <p>***In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."</p>						

**Table 2.1.3: Primary Care Utilization by Transmission Mode and Subpopulations, 2007 - 2009**

	Primary Care					
	2007		2008		2009	
	#	%	#	%	#	%
<b>Transmission Mode*</b>						
Perinatal Transmission	148	2.1%	150	2.0%	158	1.9%
Hemophilia Coagulation	8	0.1%	7	0.1%	9	0.1%
Transfusion	49	0.7%	58	0.8%	55	0.7%
Heterosexual Contact	2,021	28.3%	2,157	28.6%	2,393	29.1%
MSM (not IDU)	1,441	20.2%	1,528	20.2%	1,726	21.0%
IV Drug Use (not MSM)	119	1.7%	120	1.6%	119	1.4%
MSM/IDU	13	0.2%	18	0.2%	19	0.2%
Multiple Exposure Categories	217	3.0%	207	2.7%	239	2.9%
Other risk	2,818	39.4%	3,029	40.1%	3,316	40.3%
<b>Subpopulation*</b>						
Unduplicated clients	7,145	100.0%	7,547	100.0%	8,226	100.0%
Monolingual (Spanish)	1,032	14.4%	1,065	14.1%	1,135	13.8%
Deaf/hard of hearing	56	0.8%	69	0.9%	71	0.9%
Blind/sight impaired	176	2.5%	182	2.4%	188	2.3%
Homeless	91	1.3%	77	1.0%	125	1.5%
Transgender M to F	28	0.4%	28	0.4%	44	0.5%
Transgender F to M	4	0.1%	5	0.1%	4	0.0%
Within Harris County	6,707	93.9%	7,022	93.0%	7,632	92.8%
Outside Harris County	438	6.1%	525	7.0%	594	7.2%
Active substance abuse	270	3.8%	273	3.6%	265	3.2%
Active psychiatric illness	178	2.5%	178	2.4%	186	2.3%
* Not mutually exclusive. Data Source: CPCDMS Please note that most information on transmission mode and comorbidities is obtained during initial registration and not updated.						

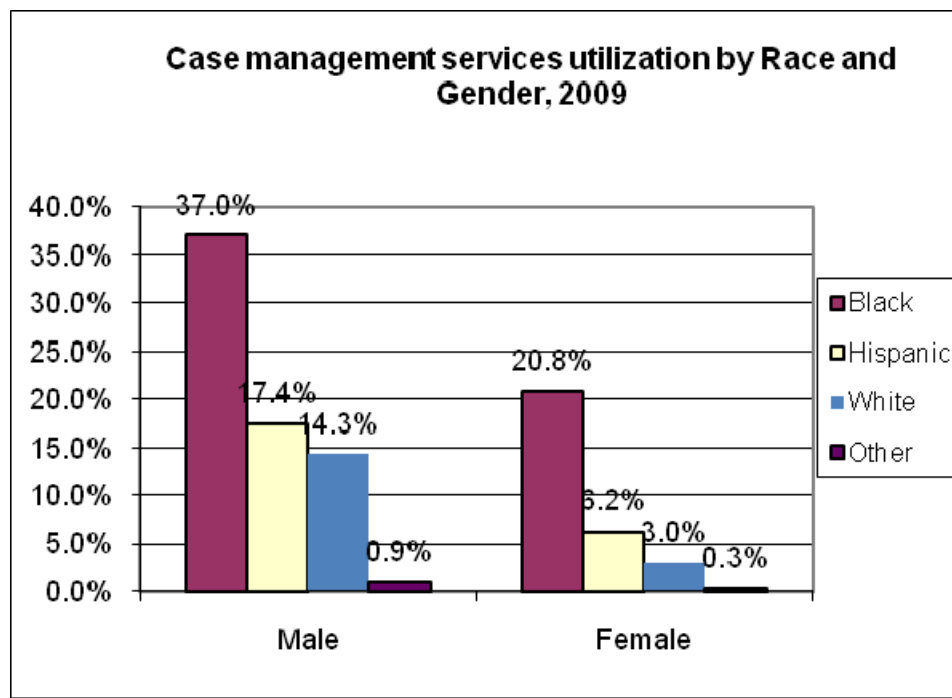
## CASE MANAGEMENT SERVICES

- ✚ Case management services were used by 5,479 unduplicated clients in 2009.
  - In comparing case management service utilization to the profile of the epidemic in the region, services are utilized proportionately across all ages and genders.
  - Blacks/African-Americans use case management services to a greater extent than Whites. Whites represent 29% of PLWHA in the region, but only 17% of case management clients, and Blacks/African-Americans represent 49% of PLWHA, but 58% of case management clients.
- ✚ Case management use appears to have decreased from 2007 to 2009. The number of clients decreased approximately 7% from 2007 (5,904 clients) to 2009 (5,479 clients).
  - The proportional use of case management services has remained stable when comparing by gender.
  - When comparing by race, data shows a slight decrease in utilization among White PLWHA, from 21% to 17% and an increase in utilization among Black/African-American PLWHA from 54% to 58%.
  - By age, case management use decreased among adults age 35 to 44 years, from 35% to 30% and increased slightly among youth from 5% to almost 7%.

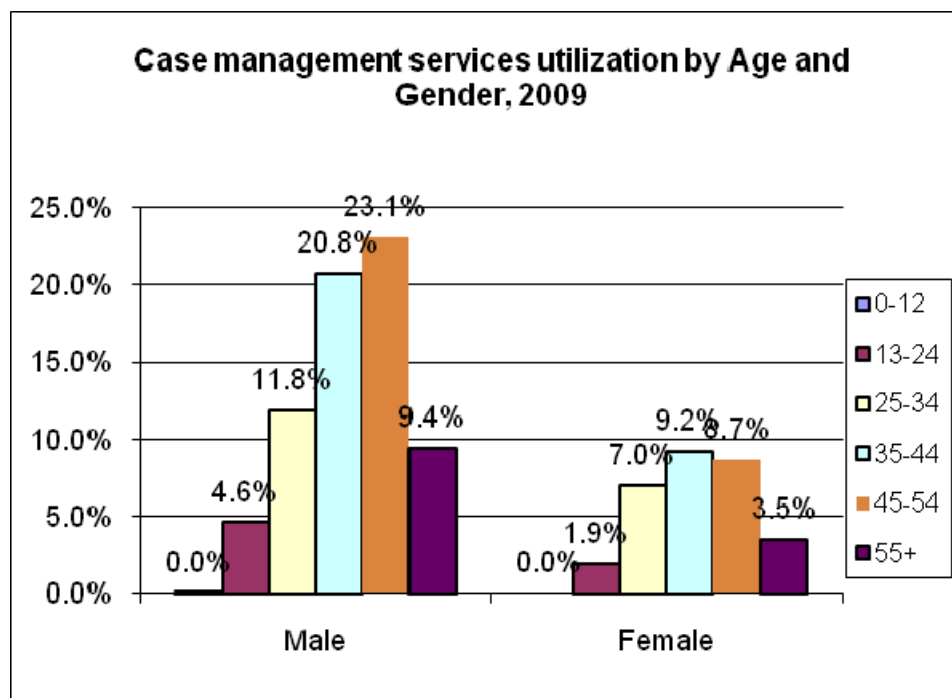
**Table 2.1.4: Case Management Utilization by Gender, Race and Age, 2009**

	Male		Female		Total	
	#	%	#	%	#	%
<b>Total</b>	3,820	69.7%	1,659	30.3%	5,479	100.0%
<b>Race</b>						
White	784	14.3%	166	3.0%	950	17.3%
Black***	2,029	37.0%	1,138	20.8%	3,167	57.8%
Hispanic	955	17.4%	340	6.2%	1,295	23.6%
Other	52	0.9%	15	0.3%	67	1.2%
<b>Age</b>						
0-12	1	0.0%	0	0.0%	1	0.0%
13-24	252	4.6%	105	1.9%	357	6.5%
25-34	648	11.8%	383	7.0%	1,031	18.8%
35-44	1,138	20.8%	502	9.2%	1,640	29.9%
45-54	1,264	23.1%	477	8.7%	1,741	31.8%
55+	517	9.4%	192	3.5%	709	12.9%
Data Source: CPCDMS ***In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."						

**Figure 2.1.3: Case Management Service Utilization by Race and Gender, 2009**



**Figure 2.1.4: Case Management services utilization by Age (in years) and Gender, 2009**





**Table 2.1.5: Case Management Utilization by Gender, Race and Age, 2007 - 2009**

	2007		2008		2009	
	(n=5,904)		(n=5,694)		(n=5,479)	
	#	%	#	%	#	%
<b>Gender</b>						
Male	4,204	71.2%	4,119	72.3%	3,820	69.7%
Female	1,700	28.8%	1,575	27.7%	1,659	30.3%
<b>Race</b>						
White	1,249	21.2%	1,177	20.7%	950	17.3%
Black***	3,193	54.1%	3,106	54.5%	3,167	57.8%
Hispanic	1,394	23.6%	1,345	23.6%	1,295	23.6%
Other	68	1.2%	66	1.2%	67	1.2%
<b>Age</b>						
0-12	0	0.0%	0	0.0%	1	0.0%
13-24	261	4.4%	343	6.0%	357	6.5%
25-34	1,133	19.2%	1,084	19.0%	1,031	18.8%
35-44	2,057	34.8%	1,839	32.3%	1,640	29.9%
45-54	1,798	30.5%	1,734	30.5%	1,741	31.8%
55+	655	11.1%	694	12.2%	709	12.9%
<p>Data Source: CPCDMS</p> <p>***In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."</p>						

**Table 2.1.6: Case Management Utilization by Transmission Mode and Subpopulations, 2007 - 2009**

	2007		2008		2009	
	(n=5,904)		(n=5,694)		(n=5,479)	
	#	%	#	%	#	%
<b>Transmission Mode*</b>						
Perinatal Transmission	25	0.4%	28	0.5%	26	0.5%
Hemophilia Coagulation	5	0.1%	4	0.1%	7	0.1%
Transfusion	58	1.0%	59	1.0%	52	0.9%
Heterosexual Contact	1,841	31.2%	1,750	30.7%	1,798	32.8%
MSM (not IDU)	1,320	22.4%	1,304	22.9%	1,082	19.7%
IV Drug Use (not MSM)	158	2.7%	138	2.4%	133	2.4%
MSM/IDU	18	0.3%	22	0.4%	22	0.4%
Multiple Exposure Categories	212	3.6%	195	3.4%	229	4.2%
Other risk	2,178	36.9%	2,125	37.3%	2,191	40.0%
<b>Subpopulation*</b>						
Unduplicated clients	5,904	100.0%	5,694	100.0%	5,479	100.0%
Monolingual (Spanish)	767	13.0%	678	11.9%	676	12.3%
Deaf/hard of hearing	65	1.1%	66	1.2%	60	1.1%
Blind/sight impaired	165	2.8%	159	2.8%	145	2.6%
Homeless	110	1.9%	81	1.4%	152	2.8%
Transgender M to F	26	0.4%	28	0.5%	34	0.6%
Transgender F to M	1	0.0%	0	0.0%	0	0.0%
Within Harris County	5,517	93.4%	5,283	92.8%	5,095	93.0%
Outside Harris County	387	6.6%	411	7.2%	384	7.0%
Active substance abuse	316	5.4%	299	5.3%	260	4.7%
Active psychiatric illness	235	4.0%	215	3.8%	203	3.7%
<p>* Not mutually exclusive.            Data Source: CPCDMS            Please note that most information on transmission mode and comorbidities is obtained during initial registration and not updated.</p>						

## DENTAL SERVICES

- ✚ The proportions of men and women using dental services are similar to their respective proportions in the epidemic.
- ✚ When compared to the regional epidemic, Blacks/African-American PLWHA are under-utilizing dental services, accounting for 49% of PLWHA but only 44% of those who use dental services. Hispanics, meanwhile, are 21% of PLWHA in the region and 27% of those who use dental services
- ✚ Dental services are accessed more frequently used by older adults.
  - PLWHA aged 45 to 54 make up 30% of the infected population in the Houston area, but account for are 38% of dental care users.
  - PLWHA aged 25 to 34 make up 19% of the epidemic but only 13% of dental care clients.
- ✚ Between 2007 and 2009, overall, the demographic proportions remained approximately the same. Adults aged 35 to 44 had a slight decrease from 34% in 2007 to 29% in 2009. Noteworthy is that there was an increase in rural clients accessing dental services, from 5% in 2007 to 9% in 2009.

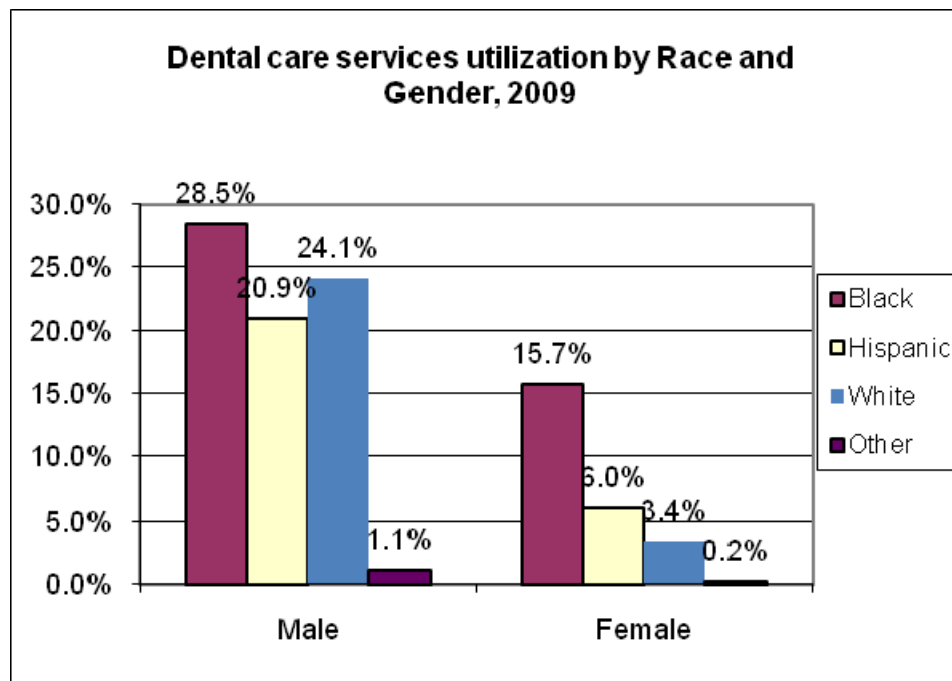
**Table 2.1.7: Dental Service Utilization by Gender, Race and Age, 2009**

	Male		Female		Total	
	#	%	#	%	#	%
<b>Total</b>	1,939	74.6%	660	25.4%	2,599	100.0%
<b>Race</b>						
White	627	24.1%	89	3.4%	716	27.5%
Black***	740	28.5%	409	15.7%	1,149	44.2%
Hispanic	544	20.9%	156	6.0%	700	26.9%
Other	28	1.1%	6	0.2%	34	1.3%
<b>Age</b>						
0-12	0	0.0%	0	0.0%	0	0.0%
13-24	44	1.7%	12	0.5%	56	2.2%
25-34	221	8.5%	126	4.8%	347	13.4%
35-44	548	21.1%	203	7.8%	751	28.9%
45-54	770	29.6%	216	8.3%	986	37.9%
55+	356	13.7%	103	4.0%	459	17.7%

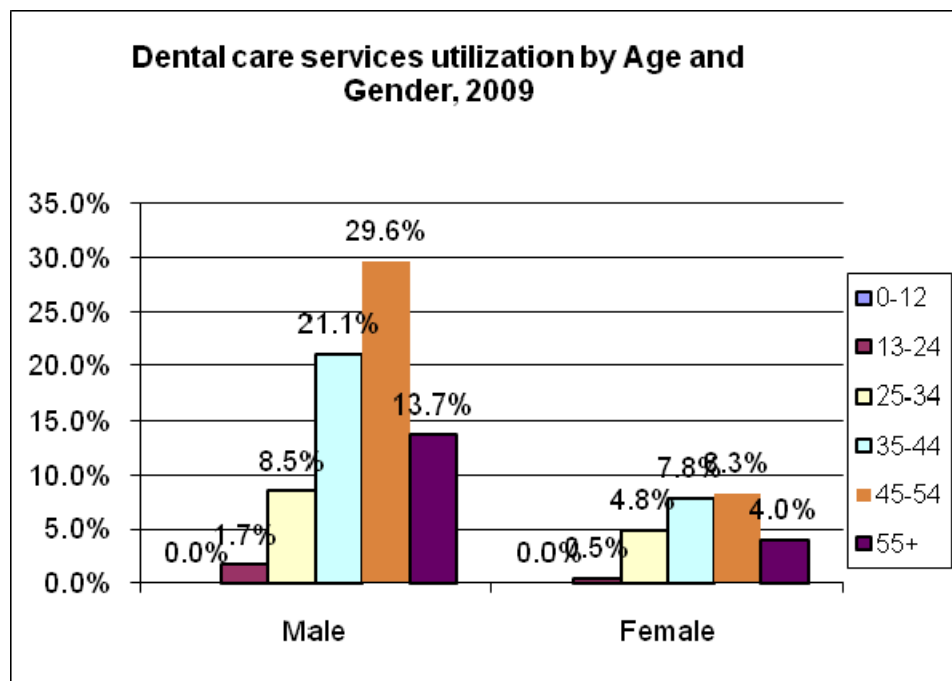
Data Source: CPCDMS

\*\*\*In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."

**Figure 2.1.5: Dental Care Services Utilization by Race and Gender, 2009**



**Figure 2.1.6: Dental Care Services Utilization by Age (in years) and Gender, 2009**




**Table 2.1.8: Dental Service Utilization by Gender, Race and Age, 2007 - 2009**


	2007		2008		2009	
	(n=2,283)		(n=2,290)		(n=2,599)	
	#	%	#	%	#	%
<b>Gender</b>						
Male	1,719	75.3%	1,703	74.4%	1,939	74.6%
Female	564	24.7%	587	25.6%	660	25.4%
<b>Race</b>						
White	667	29.2%	665	29.0%	716	27.5%
Black***	1,037	45.4%	1,020	44.5%	1,149	44.2%
Hispanic	549	24.0%	572	25.0%	700	26.9%
Other	30	1.3%	33	1.4%	34	1.3%
<b>Age</b>						
0-12	0	0.0%	0	0.0%	0	0.0%
13-24	50	2.2%	42	1.8%	56	2.2%
25-34	300	13.1%	284	12.4%	347	13.4%
35-44	766	33.6%	753	32.9%	751	28.9%
45-54	830	36.4%	857	37.4%	986	37.9%
55+	337	14.8%	354	15.5%	459	17.7%
<p>Data Source: CPCDMS</p> <p>***In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."</p>						

**Table 2.1.9: Dental Service Utilization by Transmission Mode and Subpopulations, 2007 - 2009**

	2007		2008		2009	
	(n=2,283)		(n=2,290)		(n=2,599)	
	#	%	#	%	#	%
<b>Transmission Mode*</b>						
Perinatal Transmission	4	0.2%	8	0.3%	16	0.6%
Hemophilia Coagulation	2	0.1%	3	0.1%	5	0.2%
Transfusion	23	1.0%	26	1.1%	29	1.1%
Heterosexual Contact	518	22.7%	576	25.2%	669	25.7%
MSM (not IDU)	666	29.2%	650	28.4%	717	27.6%
IV Drug Use (not MSM)	49	2.1%	54	2.4%	54	2.1%
MSM/IDU	12	0.5%	10	0.4%	16	0.6%
Multiple Exposure Categories	74	3.2%	79	3.4%	87	3.3%
Other risk	825	36.1%	791	34.5%	923	35.5%
<b>Subpopulation*</b>						
Unduplicated clients	2,283	100.0%	2,290	100.0%	2,599	100.0%
Monolingual (Spanish)	311	13.6%	314	13.7%	378	14.5%
Deaf/hard of hearing	28	1.2%	29	1.3%	23	0.9%
Blind/sight impaired	63	2.8%	61	2.7%	58	2.2%
Homeless	15	0.7%	15	0.7%	18	0.7%
Transgender M to F	7	0.3%	5	0.2%	9	0.3%
Transgender F to M	1	0.0%	1	0.0%	1	0.0%
Within Harris County	2,170	95.1%	2,170	94.8%	2,358	90.7%
Outside Harris County	113	4.9%	120	5.2%	241	9.3%
Active substance abuse	101	4.4%	100	4.4%	105	4.0%
Active psychiatric illness	92	4.0%	91	4.0%	86	3.3%
<p>* Not mutually exclusive.            Data Source: CPCDMS            Please note that most information on transmission mode and comorbidities is obtained during initial registration and not updated.</p>						

## **MENTAL HEALTH THERAPY AND COUNSELING**

-  For 2009, there were 326 clients who underwent mental health treatment and counseling.

  - Male PLWHA accessed this service to a greater degree than their proportions in the epidemic – men comprise 74% of PLWHA in the area but represent 85% of mental health clients.
  - Whites comprise 29% of PLWHA in the region but account for 52% of those using mental health services. It is noteworthy that White males account for the largest proportion of mental health clients at 50%, while typically Black males account for the largest proportions among other service categories.
  - Blacks are 49% of PLWHA but are underrepresented in mental health services at only 24%.
  - The demographic proportions by gender appear to be similar between those utilizing mental health services and those among the regional epidemic.
  
-  Use of mental health services had decreased from 564 clients in 2007 to 326 clients in 2009.

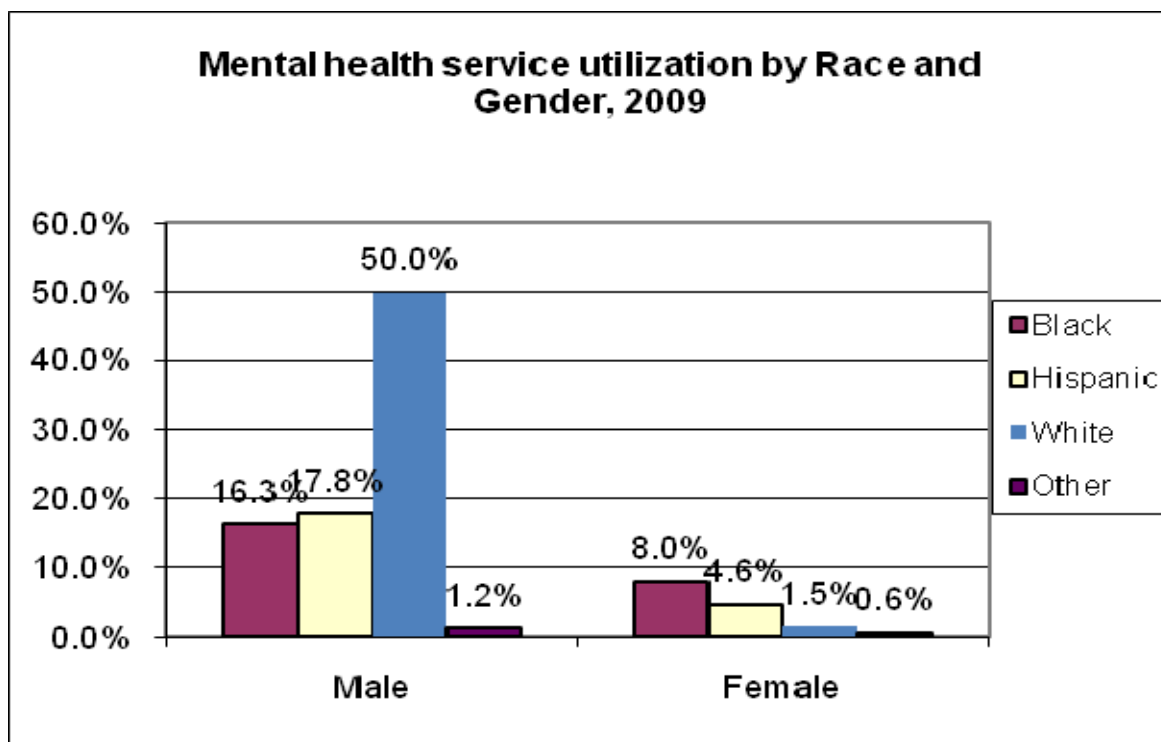
  - Among demographic categories, the proportions remained relatively stable from 2007 to 2009.
  - In terms of reported risk behavior, the category of MSM (not IDU) increased from 40% to 45%, while those reporting heterosexual risk behavior decreased from 29% to 14%.
  - Finally, there appears more urban cases: clients accessing mental health services residing in Harris County increased from 83% in 2007 to 93% in 2009.

**Table 2.1.10: Mental Health Therapy & Counseling Utilization  
by Gender, Race & Age Group, 2009**

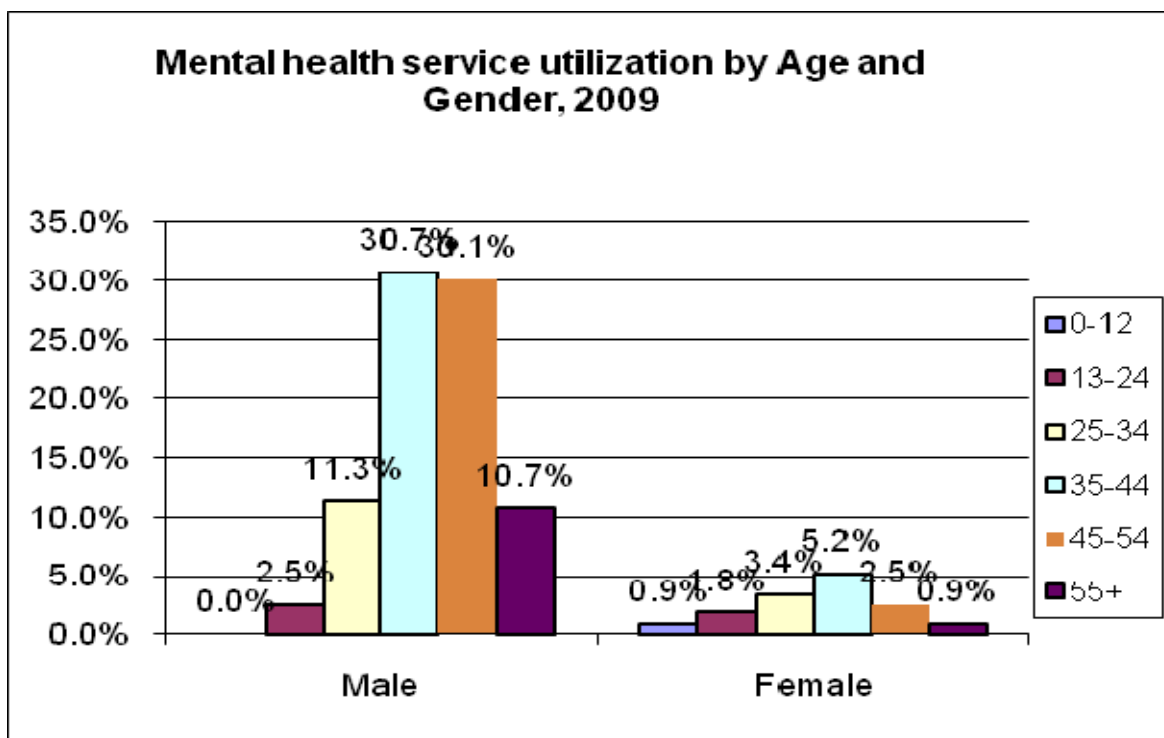
	Male		Female		Total	
	#	%	#	%	#	%
<b>Total</b>	278	85.3%	48	14.7%	326	100.0%
<b>Race</b>						
White	163	50.0%	5	1.5%	168	51.5%
Black***	53	16.3%	26	8.0%	79	24.2%
Hispanic	58	17.8%	15	4.6%	73	22.4%
Other	4	1.2%	2	0.6%	6	1.8%
<b>Age</b>						
0-12	0	0.0%	3	0.9%	3	0.9%
13-24	8	2.5%	6	1.8%	14	4.3%
25-34	37	11.3%	11	3.4%	48	14.7%
35-44	100	30.7%	17	5.2%	117	35.9%
45-54	98	30.1%	8	2.5%	106	32.5%
55+	35	10.7%	3	0.9%	38	11.7%
<p>Data Source: CPCDMS</p> <p>***In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."</p>						



**Figure 2.1.17: Mental Health Therapy and Counseling Utilization by Race and Gender, 2009**



**Figure 2.1.8: Mental Health Therapy and Counseling Utilization by Age (in years) and Gender, 2009**



**Table 2.1.11: Mental Health Therapy and Counseling Utilization  
by Gender, Race and Age, 2007 - 2009**

	2007		2008		2009	
	(n=564)		(n=472)		(n=326)	
	#	%	#	%	#	%
<b>Gender</b>						
Male	405	71.8%	357	75.0%	278	75.0%
Female	159	28.2%	119	25.0%	48	25.0%
<b>Race</b>						
White	217	38.5%	195	41.0%	168	41.1%
Black***	238	42.2%	188	39.5%	79	39.2%
Hispanic	102	18.1%	87	18.3%	73	18.4%
Other	7	1.2%	6	1.3%	6	1.3%
<b>Age</b>						
0-12	0	0.0%	2	0.4%	3	0.4%
13-24	31	5.5%	31	6.5%	14	6.6%
25-34	115	20.4%	84	17.6%	48	17.8%
35-44	211	37.4%	175	36.8%	117	36.4%
45-54	167	29.6%	138	29.0%	106	29.0%
55+	40	7.1%	46	9.7%	38	9.7%
<p>Data Source: CPCDMS</p> <p>***In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."</p>						

**Table 2.1.12: Mental Health Therapy and Counseling Utilization  
by Transmission Mode and Subpopulations, 2007 - 2009**

	2007		2008		2009	
	(n=564)		(n=472)		(n=326)	
	#	%	#	%	#	%
<b>Transmission Mode*</b>						
Perinatal Transmission	3	0.5%	12	2.5%	8	2.5%
Hemophilia Coagulation	2	0.4%	1	0.2%	0	0.0%
Transfusion	4	0.7%	5	1.1%	3	0.9%
Heterosexual Contact	163	28.9%	133	27.9%	47	14.4%
MSM (not IDU)	223	39.5%	187	39.3%	147	45.1%
IV Drug Use (not MSM)	14	2.5%	9	1.9%	4	1.2%
MSM/IDU	4	0.7%	4	0.8%	4	1.2%
Multiple Exposure Categories	19	3.4%	16	3.4%	10	3.1%
Other risk	136	24.1%	120	25.2%	108	33.1%
<b>Subpopulation*</b>						
Unduplicated clients	564	100.0%	476	100.0%	326	100.0%
Monolingual (Spanish)	37	6.6%	28	5.9%	28	8.6%
Deaf/hard of hearing	6	1.1%	6	1.3%	5	1.5%
Blind/sight impaired	18	3.2%	10	2.1%	5	1.5%
Homeless	4	0.7%	5	1.1%	4	1.2%
Transgender M to F	2	0.4%	2	0.4%	4	1.2%
Transgender F to M	0	0.0%	0	0.0%	0	0.0%
Within Harris County	468	83.0%	408	85.7%	304	93.3%
Outside Harris County	96	17.0%	68	14.3%	22	6.7%
Active substance abuse	40	7.1%	34	7.1%	21	6.4%
Active psychiatric illness	35	6.2%	24	5.0%	25	7.7%
<p>* Not mutually exclusive.  Data Source: CPCDMS  Please note that most information on transmission mode and comorbidities is obtained during initial registration and not updated.</p>						

## TEXAS HIV MEDICATION PROGRAM

- ✚ The Texas HIV Medication Program (THMP) was used by more Hispanic PLWHA in 2009 and under-utilized by White PLWHA.
  - Hispanics make up 21% of PLWHA in the region but are 32% of THMP clients.
  - Whites are 29% of PLWHA but only 21% of THMP clients.
  - Blacks/African-Americans are 49% of PLWHA and 45% of THMP clients.
- ✚ When examined by gender and age categories, the proportions of THMP usage appear to be similar when compared to their distribution in the regional epidemic.

**Table 2.1.16: Texas HIV Medication Program Utilization, Houston HSDA, 2009**

	Male		Female		Total	
	#	%	#	%	#	%
<b>Total</b>	3,726	73.3%	1,355	26.7%	5,081	100.0%
<b>Race</b>						
White	917	18.0%	125	2.5%	1,042	20.5%
Black***	1,445	28.4%	823	16.2%	2,268	44.6%
Hispanic	1,265	24.9%	382	7.5%	1,647	32.4%
Other	99	1.9	25	0.5%	124	2.4%
<b>Age</b>						
0-12	5	0.1%	7	0.1%	12	0.2%
13-24	137	2.7%	73	1.4%	210	4.1%
25-34	720	14.2%	376	7.4%	1,096	21.6%
35-44	1,275	25.1%	445	8.8%	1,720	33.9%
45-54	1,141	22.5%	327	6.4%	1,468	28.9%
55+	448	8.8%	127	2.5%	575	11.3%
Data Source: DSHS, Texas HIV Medication Program (Aids Drug Assistance Program and State Pharmacy Assistance Program data) ***In the narrative of this report, the term "Black/African-American" is used. The decision to use this particular term is based on a discussion during a meeting of the Gaps Analysis Workgroup during the 2008 Needs Assessment. Members of this workgroup made the decision that "Black/African-American" was the preferred term. In these tables, the label "Black" appears as a result of how the race labels are generated by both DSHS and the HRSA grant application. This should not be interpreted as a move away from the local decision to use "Black/African-American."						

## **QUESTION 2.2:**

**WHAT ARE THE NUMBER AND CHARACTERISTICS OF PERSONS WHO KNOW THEY ARE HIV-POSITIVE, BUT WHO HARE NOT RECEIVING PRIMARY MEDICAL CARE?**

## **WHAT ARE THE NUMBER AND CHARACTERISTICS OF PERSONS WHO KNOW THEY ARE HIV-POSITIVE, BUT WHO ARE NOT RECEIVING PRIMARY MEDICAL CARE?**

When Congress reauthorized the Ryan White Program in 2000, they placed an increased emphasis on identifying people who are HIV positive and not receiving medical care. Congress' ultimate goal is to link these people into the HIV medical care system. To this end, the Health Resources Services Administration (HRSA) wants EMAs to quantify people who are not receiving HIV medical care in their areas, and develop strategies to reach them and bring them into the care system. People are out-of-care if they have not received HIV medical care in the last 12 months. HRSA has made this very specific by defining medical care as having had blood tests to monitor their HIV condition, either CD4 count or viral load test, and/or taking HIV medication, known as antiretroviral medication. HRSA has coined the term "unmet need" to refer to these people who are not receiving HIV medical care because their needs are not being met in the medical care system.

In addition to requesting a simple "count" of the unmet need, HRSA would like a profile of the population who is out-of-care. This profile will inform outreach and service activities being designed to link populations with the care system. In order to quantify the unmet need, data about the number of people receiving HIV medical care must be compared to the prevalence, or number of people living with HIV disease. While this sounds simple in theory, a wide range of data issues make this a complex task.

### **2003 AND 2007 UNMET NEED ESTIMATES**

The following section presents estimates of unmet need in two formats – Houston EMA estimates based on 2003 data and Texas Department of State Health Services (DSHS) estimates based on 2007 data.

Originally, the responsibility of calculating unmet need fell upon each EMA planning area. Starting in 2004, DSHS took the lead in generating the unmet need estimates for each planning area in Texas, including extracting data from public and private payers. This partnership between DSHS and the five Texas EMAs works to maintain sound methods of estimating unmet need and implement the adjustment methods necessary to refine unmet need estimates for PLWHA in Texas.

There are two reasons for presenting both unmet need estimates. The data from 2003 present highly detailed demographic breakdowns not available in the DSHS estimates. The DSHS data, however, does provide the most up-to-date unmet need data currently available for the Houston EMA. The DSHS unmet need estimates are also used as part of the Houston EMA Part A application to HRSA every year.

The 2003 estimates are presented first, followed by the 2007 DSHS estimates.

## **2003 UNMET NEED ESTIMATES BY THE HOUSTON EMA**

The surveillance data presented in this report is an indication of the number of people with HIV disease, and it is felt that the percentages and trends are an accurate reflection of the epidemic in the region. In terms of total prevalence, however, this surveillance data has limitations since HIV reporting did not begin until 1999. Anyone diagnosed with HIV before 1999, who has not progressed to AIDS and who has not had another HIV test, is not included in the surveillance figures. Therefore, the surveillance data should not be considered complete for estimating the unmet need.

In the summer of 2003, the Centers for Disease Control and Prevention (CDC) provided the Houston EMA with a prevalence estimate that they developed for the region. This estimate, based on December 31, 2002 data, increases the prevalence figures to account for those who are not included in the surveillance statistics.

For this 2004 unmet need calculation, the CDC prevalence estimate, 20,045, is increased only by the number of new HIV cases diagnosed in 2003, or 604 cases. This results in a total prevalence of 20,649 people living with either HIV or AIDS in the Houston EMA.

Since the surveillance data presented in this profile is considered an accurate reflection of the epidemic in the region, demographics of the unmet need population are calculated based upon the percentages within the surveillance data.

### **SERVICE UTILIZATION**

CPCDMS provides excellent unduplicated patient counts and profiles of patients receiving Part A and B services. This data was accurately augmented with data from Parts C and D. The Harris County Jail and the Veterans Administration Hospital provided their patient data. These data were integrated with CPCDMS and are presented in Table 2.1.1. Slight data discrepancies are footnoted on that table.

In order to estimate the number of people receiving HIV medical care from a private provider, the Ryan White Program conducted a survey of major insurers and private physicians who treat large number of people living with HIV disease. Most major insurers responded, either in July 2003 or April 2004. The most recent responses are used. These insurers provided data on total number of patients with HIV covered by their plans and the gender of these patients. Other demographic profile information was not available.

Physician responses were limited, but four practitioners provided information on 1,072 patients. These physicians provided both gender and racial distribution. That distribution is applied to the total number of HIV patients covered by the private insurers. It should be noted that one physician reported 5% of patients were of Asian race. Basing percentages on this figure may overstate the Asian number receiving care and should be further examined.

Since neither physicians nor insurers provided age information, the CPCDMS age profile is applied. This profile includes age-adjusted Veterans Administration (VA) data. The VA data was allocated to age groups that correspond to the age groups used in this profile.

Medicaid data, prepared by the Texas Health and Human Services Commission, showed the number of people treated for HIV or AIDS during calendar year 2003. The Medicaid profile includes both Part A and Part B Medicaid claims and encounter data.

Medicare data are not included.

## **RESULTS**

Without including Medicare data, an estimated 42.13% of people living with HIV and AIDS in the Houston EMA are outside the medical care system. This includes nearly 47.75% of men and 25.94% of women. (Table 2.2.1)

Considering the race and ethnicity of those with unmet need, Whites/Anglos have the largest percentage outside the medical care system, nearly 52%. Almost 40% of Blacks/African-Americans are outside the care system, and Hispanics/Latinos have the lowest unmet need, 34.74%. (Table 2.2.2)

Examining unmet need by age using current data sources, the largest unmet need is among pediatrics, age 0 – 12, with 56.45% out-of-care. Youth include the largest in-care percentage, with 33.50% out-of-care. Both the 25 to 44 year group and 45 to 64 year group have approximately 42% out-of-care. (Table 2.2.3)

**Table 2.2.1: Houston EMA 2003 Unmet Need Estimate Gender Profile**

	HIV/AIDS Prevalence	In-Care CPCDMS*	In-Care Private**	In-Care Medicaid***	Total In-Care	Total Unmet Need	Unmet Need Percentage
<b>Total</b>	20,649	7,331	2,850	1,769	11,950	8,699	42.13%
<b>Gender</b>							
Men	15,322	5,361	2,017	627	8,005	7,317	47.75%
Women	5,327	1,970	833	1,142	3,945	1,382	25.94%
<p>* Includes Parts A, B, C, D, Ft Bend Family Health Center, Harris County Jail, Veterans Administration.  VA data includes 19 people who died during 2003.  Jail data inconsistent on race with discrepancy of one client.  Part D data from Texas Children's Hospital may reflect duplicate data of Hispanic ethnicity.  ** Totals provided by gender. Insurers include: BC/BS of Texas, CIGNA, United Healthcare, Humana.  *** Includes Part A and Part B Medicaid data.</p>							



**Table 2.2.2: Houston EMA 2003 Unmet Need Estimate Racial/Ethnic Profile**

		Total	White, non Hispanic	Black, non- Hispanic	Hispanic	Other
<b>HIV/AIDS</b>	<b>Prevalence</b>	20,649	6,835	9,912	3,696	206
<b>In-Care</b>	<b>CPCDMS*</b>	7,331	1,896	3,903	1,450	82
<b>In-Care</b>	<b>Private**</b>	2,850				
<b>Private race</b>	<b>Profile Male</b>	2,017	914	472	587	46
<b>Private race</b>	<b>Profile Female</b>	833	286	338	167	42
<b>In-Care***</b>	<b>Medicaid Male</b>	627	105	368	110	44
<b>In Care***</b>	<b>Medicaid Female</b>	1,142	103	907	98	34
<b>Total</b>	<b>In-Care</b>	11,950	3,304	5,988	2,412	164
<b>Total</b>	<b>Unmet Need</b>	8,699	3,531	3,924	1,284	42
<b>Unmet Need</b>	<b>Percentage</b>	42.13%	51.66%	39.59%	34.74%	20.39%
<p>* Includes Parts A, B, C, D, Ft Bend Family Health Center, Harris County Jail, Veterans Administration.            VA data includes 19 people who died during 2003.            Jail data inconsistent on race with discrepancy of one client.            Part D data from Texas Children's Hospital may reflect duplicate data of Hispanic ethnicity.            ** Totals provided by gender. Insurers include: BC/BS of Texas, CIGNA, United Healthcare, Humana.            *** Includes Part A and Part B Medicaid data.            Private utilization by race is based upon a survey of private physicians (n=4).</p>						

**Table 2.2.3: Houston EMA 2003 Unmet Need Estimate Age Profile**

		Total	0 - 12	13 - 24	25 - 44	45 - 64	65+
<b>HIV/AIDS</b>	<b>Prevalence</b>	20,649	248	991	12,369	6,690	372
<b>In-Care</b>	<b>CPCDMS*</b>	7,331	54	416	4,355	2,359	127
<b>In-Care</b>	<b>Private**</b>	2,850					
<b>Private Age</b>	<b>Profile Male</b>		20	61	1,190	706	40
<b>Private Age</b>	<b>Profile Female</b>		17	75	516	225	8
<b>In-Care***</b>	<b>Medicaid Male</b>	627	6	38	370	201	12
<b>In Care***</b>	<b>Medicaid Female</b>	1,142	11	69	674	365	23
<b>Total</b>	<b>In-Care</b>	11,950	108	659	7,105	3,856	210
<b>Total</b>	<b>Unmet Need</b>	8,699	140	332	5,264	2,834	162
<b>Unmet Need</b>	<b>Percentage</b>	42.13%	56.45%	33.50%	42.56%	43.36%	43.55%
<p>* Includes Parts A, B, C, D, Ft Bend Family Health Center, Harris County Jail, Veterans Administration.            VA data includes 19 people who died during 2003.            Jail data inconsistent on race with discrepancy of one client.            Part D data from Texas Children's Hospital may reflect duplicate data of Hispanic ethnicity.            ** Totals provided by gender. Insurers include: BC/BS of Texas, CIGNA, United Healthcare, Humana.            *** Includes Part A and Part B Medicaid data.            Utilization by age is based up on percentages from CPCDMS.            Veterans Administration patients redistributed to under 65 year age groups.</p>							

## **2007 Unmet Need Estimates by DSHS**

As of December 31, 2007, the number of PLWA was 11,358 and the number of PLWH (non-AIDS, aware) was 7,891. The total number of people living with HIV and AIDS in the Houston EMA was 19,249.

The number of PLWA in care was 7,766, or 68% of the total number of PLWA in the Houston EMA as of December 31, 2007. The number of PLWH (non-AIDS, aware) in care was 4,303 (55%) among all PLWH in the EMA. The total number of PLWHA who received HIV primary medical services as of the end of 2007 was 12,069 (63%).

Using the inputs for care patterns obtained, the Houston EMA estimates that 3,592 (32%) of the diagnosed PLWA were not receiving HIV primary medical care. For PLWH, 3,588 (45%) were found to be out-of-care. After combining the two groups, the total number of PLWHA who had unmet need in the Houston EMA through the end of 2007 was 7,180 (37%) among all PLWHA. Please note that estimates provided by TDSHS indicate that the Houston EMA has the highest level of unmet need (37% by their estimates) when compared to other EMAs in the state (Fort Worth 31%, San Antonio 30%, Dallas 26% and Austin 23%).

Unmet need for medical care is defined following the HRSA definition such that a PLWHA is said to have unmet need for medical care if there is no evidence of either a CD4 count, a viral load (VL) test or antiretroviral therapy (ART) during the 12 months of interest. If there is evidence of one of these three things being present, the person is considered to have their medical needs met.

### **Methods**

The following presents a narrative of the estimation methods used to compile the data necessary for the calculation of the Unmet Need Estimate.

The Houston EMA used data provided by DSHS as part of the cross-title collaboration along with data from the Houston Veterans Affairs Medical Center to provide an updated unmet need estimate based on data through 2007. The majority of the data were derived by matching and unduplicating HARS data against the following utilization databases.

- **HIV/AIDS Reporting System (HARS)** - Data from TDSHS HARS through the end of 2007 were used to estimate the prevalent population. The data include all reported HIV/AIDS cases living as of December 31, 2007 with a diagnosis residence county in the Houston EMA, with cases in the TDCJ removed, since a system for matching that data does not yet exist. Additionally, the first assessment of met need begins with HARS by examining cases for evidence of CD4 or viral load testing. The data on care patterns in 2007 were further derived through matches with the following:

- Texas AIDS Drug Assistance Program (ADAP) - If ADAP provided ART for a client, then that person was considered to have met medical need for the year in which the medication was provided. Name-based matching was performed to determine persons with a met medical need during 2007.
- Electronic Lab Reporting System - The largest providers of laboratory services throughout the state report CD4 and viral load measurements to the TDSHS. Name-based matching of these reports was used to determine if individuals received these measurements during 2007.
- AIDS Regional Information and Evaluation System (ARIES) - Services provided to RW-eligible clients (all Parts) by funded service providers are reported in the ARIES. If a client received a viral load lab test, CD4 count, ART, laboratory service or ambulatory/outpatient medical care during 2007, the client was classified as having a met medical need during that year. When available, name-based matching was used to detect persons with a met medical need during 2007. When client names were not available, matching was based on a unique number generated in the ARIES and HARS.
- Medicaid - Name-based matching of Medicaid clients receiving relevant procedures (CD4 counts, VL tests and ART) was used to determine if an individual had a met medical need during 2007.
- Private Insurers - A few of the largest private providers in Texas extracted relevant procedures (CD4 counts, VL measurements, and ART) from their claims systems. Matching was based on available data elements such as the first and third initial of the first and last name and date of birth.

The estimates provided may present an overestimation of unmet need due to the following data limitations:

1. Cases diagnosed in the TDCJ are excluded from this analysis, although some diagnosed within the prison system have since been released and are living in Texas. A systematic source of information on those receiving care within the prison system is not yet available and those who remain incarcerated cannot be distinguished from those
2. The data sources also do not contain all the care provided by the VA, private insurance providers and Medicare. Like other RW Program grantees, it is difficult to obtain client-level Medicare utilization data, since Medicare is a federal benefit that is not administered by state agencies. One potential effect may be found in the 55+ age group showing the highest proportion of unmet medical need. Much of this group is eligible for Medicare benefits, so it is possible that this group is receiving HIV-related care through Medicare.

3. Matches conducted between HARS and some of the cases in the ARIES and between HARS and private payer data were based on a unique identifier or limited data elements rather than client name; this may underestimate the true number of clients with met need from these data sources.
4. There are persons reported in HARS who have since moved away (out-migrated cases). A systematic way of identifying and removing these out-migrated cases is not yet in place; these cases remain in the base population and inflate the unmet need estimate.
5. Finally, HARS often does not capture all of the CD4 counts and viral loads for cases, which limits the yield of met need found. Within HARS, if a CD4 count was within 2 months of an AIDS diagnosis, or a detectable viral load was within 2 months of initial HIV diagnosis, these instances were not included as having met medical need.

### **Assessment of Unmet Need**

For the Houston EMA, African American PLWH have the highest proportion of clients with unmet need at 51%. Interestingly, among PLWA, Whites have a slightly higher proportion (34%) when compared to the other races/ethnicities; this may be related to White PLWA having more access to private providers, whose data is limited at this time.

Among the age groups, those 55+ appear to have the greatest proportion of their population out of care for PLWA at 41%; however, Medicare data was not available for this analysis and may explain this greater proportion.

When looking at unmet need by exposure category, the risk of IDU had high proportions of their population out of care, yet MSM and the category of Heterosexual contact had greater numbers out of care. The large number and percentage of out of care in the No Identified Risk (NIR)/Other category could indicate two things: that these were newer cases which have not yet had a full surveillance investigation, or that these were older cases that are lost to follow-up with no risk established. However, CDC believes that heterosexual contact may be the main transmission mode for persons in this category because women may be unaware of how they were infected if they did not know of their partner's HIV status. If this category is taken into account, then the exposure of heterosexual contact may represent a much higher proportion of the unmet need population.

In separating out HIV cases versus AIDS cases of unmet need, it is evident that the proportions of PLWH who are not receiving medical care is overall greater than the proportions among PLWA. However, some of these differences may be attributable to the interaction of the case definition for AIDS and the definition of met need. A large proportion of AIDS cases meet the case criteria for AIDS because of CD4 testing, which is also an indicator of met need. Consequently, the larger proportion of AIDS cases

with met need may be a result of the fact that infected individuals receiving medical care are more likely to have an AIDS diagnosis because of that care. Nevertheless, almost all demographic and exposure categories for PLWH show significantly greater proportions of unmet need than PLWA. It is noteworthy that only White individuals have similar proportions of unmet need regardless of disease status (36% for PLWH and 34% for PLWA), while for both Hispanics and African Americans, the unmet need among African American and Hispanic HIV cases is much higher than it is for AIDS cases.

**Table 2.2.4: Number and proportions of PLWHA with Unmet Need in the Houston EMA, 2007**

	PLWHA		PLWH		PLWA	
	#	%	#	%	#	%
<b>Total</b>	<b>7,180</b>	<b>37.3</b>	<b>3,588</b>	<b>45.5</b>	<b>3,592</b>	<b>31.6</b>
<b>Race/Ethnicity</b>						
White	1,954	34.7	767	35.9	1,187	34.0
Black	3,647	38.9	2,134	51.0	1,513	29.1
Hispanic	1,486	37.1	636	43.4	850	33.4
Other/Unknown	93	41.2	51	45.5	42	34.1
<b>Age</b>						
<2 years	2	33.3	2	40.0	0	0.0
2-12 years	44	39.3	34	37.0	10	50.0
13-24 years	319	37.1	267	43.6	52	21.1
25-34 years	1,455	40.1	1,044	49.6	411	27.0
35-44 years	2,374	36.4	1,221	46.7	1,153	29.5
45-54 years	1,979	34.9	746	42.0	1,233	31.7
55+ years	1,007	41.0	274	39.9	733	41.4
<b>Exposure Category</b>						
MSM	2,682	33.2	1,129	36.9	1,553	30.9
IDU	830	41.0	325	49.2	505	37.0
MSM/IDU	385	36.3	124	40.4	261	34.6
Heterosexual	1,611	34.2	862	44.2	749	27.2
NIR/Other	1,589	50.5	1,086	61.9	503	36.1
Data Source: TDSHS 2007 HARS data matched against other data sources						

# **APPENDIX: A**

## **POPULATION PROJECTIONS BY AGE, GENDER AND COUNTY**

**POPULATION CHANGE**

COUNTY	POPULATION 2000		POPULATION 2010		PERCENT CHANGE 2000-2010
	#	%	#	%	
Chambers					
Under 2 years	672	2.6%	770	2.5%	14.6%
2-12 years	4,504	17.3%	4,273	13.6%	-5.1%
13-24 years	4,473	17.2%	5,775	18.4%	29.1%
25-44 years	7,783	29.9%	8,173	26.0%	5.0%
45-64 years	6,249	24.0%	9,068	28.9%	45.1%
65 and older	2,350	9.0%	3,316	10.6%	41.1%
Total	26,031	100.0%	31,375	100.0%	20.5%
Fort Bend					
Under 2 years	10,475	3.0%	10,798	2.4%	3.1%
2-12 years	69,263	19.5%	63,465	14.1%	-8.4%
13-24 years	60,807	17.2%	88,613	19.7%	45.7%
25-44 years	114,336	32.3%	110,664	24.6%	-3.2%
45-64 years	79,402	22.4%	141,207	31.4%	77.8%
65 and older	20,169	5.7%	35,064	7.8%	73.9%
Total	354,452	100.0%	449,811	100.0%	26.9%
Harris					
Under 2 years	114,059	3.4%	124,181	3.1%	8.9%
2-12 years	611,189	18.0%	655,435	16.6%	7.2%
13-24 years	611,150	18.0%	670,299	17.0%	9.7%
25-44 years	1,136,376	33.4%	1,219,700	30.9%	7.3%
45-64 years	674,909	19.8%	946,732	24.0%	40.3%
65 and older	252,895	7.4%	335,335	8.5%	32.6%
Total	3,400,578	100.0%	3,951,682	100.0%	16.2%
Liberty					
Under 2 years	1,986	2.8%	2,263	2.8%	13.9%
2-12 years	11,826	16.9%	12,101	14.8%	2.3%
13-24 years	11,995	17.1%	14,568	17.8%	21.5%
25-44 years	22,134	31.6%	23,300	28.4%	5.3%
45-64 years	15,021	21.4%	20,729	25.3%	38.0%
65 and older	7,192	10.3%	8,969	10.9%	24.7%
Total	70,154	100.0%	81,930	100.0%	16.8%
Montgomery					
Under 2 years	8,975	3.1%	10,292	2.7%	14.7%
2-12 years	53,217	18.1%	57,250	15.1%	7.6%
13-24 years	48,105	16.4%	67,694	17.8%	40.7%
25-44 years	90,013	30.6%	95,900	25.3%	6.5%
45-64 years	67,910	23.1%	108,793	28.7%	60.2%
65 and older	25,548	8.7%	39,434	10.4%	54.4%
Total	293,768	100.0%	379,363	100.0%	29.1%

(Table continues)



COUNTY	POPULATION 2000		POPULATION 2010		PERCENT CHANGE 2000-2010
	#	%	#	%	
Waller					
Under 2 years	963	2.9%	1,172	2.8%	21.7%
2-12 years	5,032	15.4%	6,109	14.9%	21.4%
13-24 years	8,294	25.4%	10,126	24.6%	22.1%
25-44 years	8,614	26.4%	10,512	25.6%	22.0%
45-64 years	6,701	20.5%	9,874	24.0%	47.4%
65 and older	3,059	9.4%	3,344	8.1%	9.3%
Total	32,663	100.0%	41,137	100.0%	25.9%
Austin					
Under 2 years	625	2.6%	674	2.6%	7.8%
2-12 years	3,774	16.0%	3,630	14.2%	-3.8%
13-24 years	3,877	16.4%	4,319	16.9%	11.4%
25-44 years	6,218	26.4%	6,045	23.6%	-2.8%
45-64 years	5,601	23.7%	7,175	28.0%	28.1%
65 and older	3,495	14.8%	3,739	14.6%	7.0%
Total	23,590	100.0%	25,582	100.0%	8.4%
Colorado					
Under 2 years	484	2.4%	606	2.9%	25.2%
2-12 years	3,043	14.9%	2,939	13.9%	-3.4%
13-24 years	3,509	17.2%	3,478	16.5%	-0.9%
25-44 years	4,848	23.8%	4,997	23.7%	3.1%
45-64 years	4,715	23.1%	5,446	25.8%	15.5%
65 and older	3,791	18.6%	3,635	17.2%	-4.1%
Total	20,390	100.0%	21,101	100.0%	3.5%
Walker					
Under 2 years	1,235	2.0%	1,329	2.0%	7.6%
2-12 years	6,619	10.7%	7,408	10.9%	11.9%
13-24 years	17,446	28.2%	16,728	24.7%	-4.1%
25-44 years	19,230	31.1%	22,060	32.6%	14.7%
45-64 years	11,702	18.9%	13,718	20.3%	17.2%
65 and older	5,526	8.9%	6,421	9.5%	16.2%
Total	61,758	100.0%	67,664	100.0%	9.6%
Wharton					
Under 2 years	1,164	2.8%	1,359	3.1%	16.8%
2-12 years	7,004	17.0%	7,000	16.1%	-0.1%
13-24 years	7,508	18.2%	7,703	17.7%	2.6%
25-44 years	10,916	26.5%	11,126	25.5%	1.9%
45-64 years	8,874	21.5%	10,736	24.6%	21.0%
65 and older	5,722	13.9%	5,636	12.9%	-1.5%
Total	41,188	100.0%	43,560	100.0%	5.8%



