Asthma Health Facts 2011

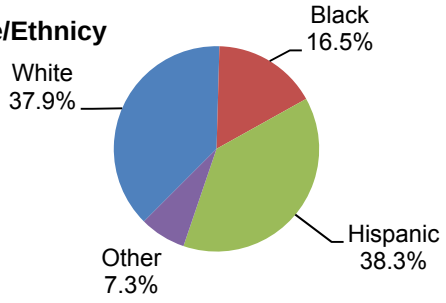
Texas Asthma Control Program

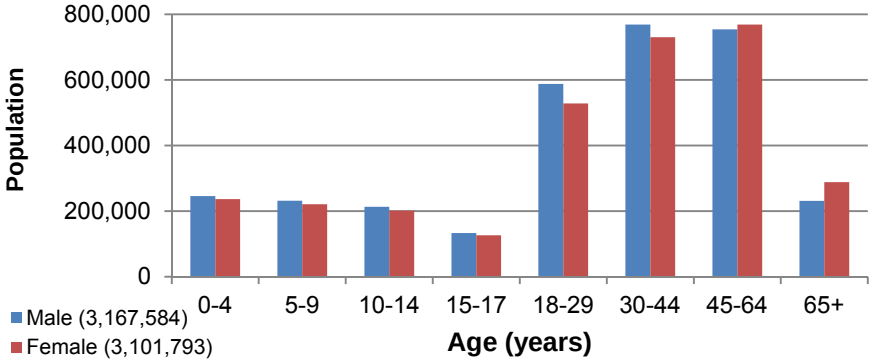
Texas Health Service Region 6

Demography of Texas Health Service Region (HSR) 6[1], 2011

Total Population: 6,269,377

Race/Ethnicy





Asthma Mortality Rates[2] * (per 100,000 persons), HSR 6, Texas, 2005-2011

	Region 6 (95%CI)	Texas (95%CI)
Total	0.7 (0.7, 0.8)	0.9 (0.8, 0.9)
Gender		
Male	0.6 (0.5, 0.7)	0.6 (0.6, 0.7)
Female	0.9 (0.8, 1.1)	1.1 (1.0, 1.2)
Race/Ethnicity		
White	0.9 (0.7, 1.0)	1.0 (1.0, 1.1)
Black	1.6 (1.3, 1.9)	1.9 (1.7, 2.1)
Hispanic	0.2 (0.1, 0.2)	0.3 (0.3, 0.4)
Other	0.9 (0.5, 1.3)	0.8 (0.6, 1.1)
Age Group (years)		
0-4	---	0.2 (0.1, 0.3)
5-9	---	0.3 (0.2, 0.4)
10-14	---	0.2 (0.1, 0.2)
15-34	0.3 (0.2, 0.4)	0.2 (0.2, 0.3)
35-64	0.7 (0.6, 0.9)	0.9 (0.9, 1.0)
65+	3.8 (3.1, 4.4)	3.9 (3.6, 4.2)

Prevalence of Current Asthma Among Children [3], HSR 6, Texas, 2011

	Region 6 (95%CI)	Texas (95%CI)
Total	6.9 (4.2, 9.6)	8.0 (6.7, 9.3)
Gender		
Male	6.7 (3.2, 10.2)	8.6 (6.8, 10.4)
Female	7.2 (3.1, 11.3)	7.4 (5.6, 9.3)
Race/Ethnicity		
White	5.4 (2.3, 8.5)	8.2 (6.3, 10.1)
Black	9.4 (2.1, 16.7)	11.5 (7.1, 15.8)
Hispanic	5.6 (1.7, 9.5)	6.6 (4.8, 8.5)
Other	--	7.1 (2.0, 12.1)
Age Group (years)		
0-4	--	5.3 (3.1, 7.6)
5-9	9.2 (3.1, 15.3)	10.3 (7.3, 13.3)
10-14	9.1 (2.8, 15.4)	8.6(6.2, 11.1)
15-17	8.3 (1.5, 15.1)	9.4 (6.3, 12.6)

Prevalence of Current Asthma Among Adults, HSR 6, Texas[3], 2011

	Region 6 (95%CI)	Texas (95%CI)
Total	7.0 (5.7, 8.4)	7.4 (6.7, 8.1)
Gender		
Male	4.1 (2.4, 5.8)	5.1 (4.2, 6.0)
Female	9.9 (7.8, 12.1)	9.7 (8.6, 10.7)
Race/Ethnicity		
White	8.8 (6.8, 10.8)	9.2 (8.2, 10.2)
Black	12.9 (7.3, 18.5)	10.2 (7.5, 13.0)
Hispanic	2.9 (1.0, 4.7)	4.2 (3.2, 5.2)
Other	3.4 (0.7, 6.0)	5.2 (2.8, 7.5)
Age Group (years)		
18-29	4.9 (1.5, 8.4)	4.9 (3.4, 6.3)
30-44	6.9 (4.2, 9.7)	7.7 (6.3, 9.0)
45-64	8.4 (6.2, 10.6)	8.5 (7.3, 9.7)
65+	7.4 (5.0, 9.9)	8.1 (6.8, 9.3)
Smoking Status		
Current	12.2 (7.3, 17.1)	9.6 (7.7, 11.5)
Former	7.0 (4.4, 9.5)	9.0 (7.5-10.5)
Never	5.5 (4.0, 7.0)	6.2 (5.4-7.0)
Weight Status		
BMI < 30	5.3 (3.9, 6.6)	6.6 (5.8, 7.5)
BMI ≥ 30	11.9 (8.2, 15.5)	9.7 (8.2, 11.1)

Data Sources:

1. 2011 Texas population data, Texas Center for Health Statistics (CHS), Texas Department of State Health Services.
2. Vital Statistics Unit (VSU), Texas Center for Health Statistics (CHS), Texas Department of State Health Services 2005-2011.
3. 2011 Texas Behavioral Risk Factor Surveillance System (BRFSS) Texas Center for Health Statistics (CHS), Texas Department of State Health Services.

Notes:

-- Indicates sample size less than 50 respondents and/or too small to be statistically valid.
--- Indicates less than 20 reported deaths.
* Asthma (ICD-10 Code J-45 or J-46) is underlying cause of death.

Asthma Health Facts 2011

Texas Asthma Control Program

Texas Health Service Region 6

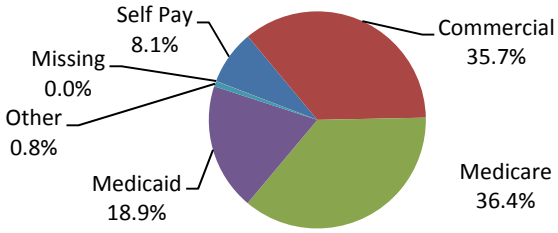
Asthma Hospitalization Rates[4 #] (per 10,000 persons), HSR 6, Texas, 2011

Characteristics	Region 6 Discharges	Discharge Rate (95% CI) Region 6	Discharge Rate (95% CI) Texas
Total	4,850	7.7 (7.5-8.0)	9.4 (9.3, 9.5)
Gender			
Male	1,801	5.7 (5.4-5.9)	7.4 (7.3, 7.6)
Female	3,049	9.8(9.5-10.2)	11.4 (11.3, 11.6)
Race/Ethnicity			
White Non-Hispanic	1,906	8.0 (7.7-8.4)	8.8 (8.7, 9.0)
Black Non-Hispanic	1,667	16.2 (15.4-16.9)	19.5 (19.0, 20.0)
Hispanic	908	3.8 (3.5-4.0)	6.6 (6.5, 6.8)
Other Non-Hispanic	276	6.0 (5.3-6.8)	11.4 (10.8, 12.0)
Age Group (years)			
0-4	637	13.2 (12.2-14.2)	20.8 (20.1, 21.4)
5-9	614	13.5 (12.5-14.6)	18.1 (17.4, 18.7)
10-14	233	5.6 (4.9-6.3)	8.1 (7.7, 8.5)
15-34	452	2.4 (2.2-2.6)	2.6 (2.5, 2.8)
35-64	1,820	7.2 (6.9-7.6)	8.1 (7.9, 8.3)
65+	1,094	21.1 (19.8-22.3)	20.6 (20.1, 20.6)

Cost of Asthma-related Hospital Stays[4 #], HSR 6, Texas, 2011

Payer	Hospital Discharges	Percent of Hospital Discharges (%)	Total Charges ($)
Total	4,850	100.0	133,582,798.70
Self Pay	531	10.9	10,868,805.67
Commercial	1,812	37.4	47,706,767.52
Medicare	1,170	24.1	48,686,171.37
Medicaid	1,296	26.7	25,244,715.81
Other	40	0.8	1,065,387.73
Missing	1	0.02	10,950.60

Percent (%) of Total Hospital Charges by Payer Among Patients with Asthma as Primary Diagnosis



Medicaid Utilization and Reimbursement for Asthma[5 # ^], HSR 6, Texas, 2011

Type of Care	Total Reimbursement Amount ($)	Average Reimbursement Amount ($)	Number of Claims	Number of Clients	Percent of Clients with Repeat Visits (%)
All Types of Care	23,655,898.76	151.12	156,537	66,556	46.4
Inpatient Hospital	5,520,843.82	3,117.36	1,771	1,505	12.4
Outpatient Hospital	6,281,460.25	348.70	18,014	11,528	25.0
Physician	11,853,594.69	86.68	136,752	63,779	42.1

Data Sources:

4. Texas Health Care Information Collection, 2011 Inpatient Hospital Discharge Public Use Data File.
5. Medicaid Data, Texas Health and Human Services Commission, 2011.

Notes:

Records listing asthma (ICD–9: 493.0 – 493.9) as the primary diagnosis.
** Indicates less than 12 hospitalizations.
^ Paid and partially paid Medicaid Fee-for-Service and Patient Care Case Management claims or Star and StarPlus claims for fiscal year 2011.

See last page of document for detailed data source information.

Breathe Across Texas
Texas Asthma Control Program

About Texas Asthma Surveillance Data

Asthma is a widespread public health problem which has increased in the past two decades in Texas and the United States. Asthma affects more children than any other chronic disease and is one of the most frequent reasons for hospital admissions among children. Asthma has a major impact on the health of the population and the burden falls disproportionately on some populations.

Monitoring trends in asthma morbidity and mortality among Texans is important for increasing the level of knowledge about this prevalent condition. Surveillance data help public health officials focus their efforts to address asthma by targeting those most in need of intervention. Data also raise awareness about the effect of asthma on the health of the community. This fact sheet identifies particular communities and demographic groups at risk for developing life threatening episodes of asthma.

Asthma Health Facts are available for download on the Texas Asthma Control Program website: http://www.dshs.state.tx.us/asthma/default.shtm.

Data Sources

1 - Demographics

The population data presented here are based on 2011 population estimates from the U.S. Census Bureau's Population Estimates Program. Population data were obtained from the Texas Center for Health Statistics (CHS) Texas Department of State Health Services. Population data provide estimates of the total population of counties and places in Texas by age, sex, and race/ethnicity.

2 - Mortality Rates

Mortality data were obtained from the Texas CHS Vital Statistics Unit (VSU). An asthma death was defined as any death for which asthma was listed as the underlying cause. The Tenth Revision of the International Classification of Diseases (ICD–10) was implemented for years 1999 and onward. Deaths with a diagnosis code of J–45 or J–46 were classified as asthma deaths. Prior to 1999, cause of death was coded according the Ninth Revision of the International Classification of Diseases (ICD–9). Deaths with a diagnosis code of 493.0 to 493.9 were classified as asthma deaths. Mortality data from 1999 and later cannot be directly compared with data from previous years due to this coding change.

3 - Prevalence

The Texas Behavioral Risk Factor Surveillance System (BRFSS) data were analyzed to estimate the asthma prevalence among Texas children (<18 years) and adults (≥18 years). The BRFSS is a population-based, random-digit dialed telephone survey of civilian, non-institutionalized adults, aged 18 years and older. The survey is coordinated by the Centers for Disease Control and Prevention (CDC) and is conducted annually by all 50 US states, three territories, and the District of Columbia. The BRFSS covers a wide range of health behaviors and status indicators. Beginning in 1999, the BRFSS has included questions related to asthma. Childhood asthma questions were added in 2001, with a wording change in 2005. For the childhood questions, the adult who is surveyed answers for the child. All estimates presented in this report are based on the 2011 Texas BRFSS Survey. The data are weighted to more accurately reflect the population by accounting for age, gender, and probability of selection. These estimates are derived from self-reported interviews and may underestimate the true asthma prevalence among Texas adults and children because they reflect only cases of asthma that have been diagnosed by a health care professional. The data presented in this report are for current asthma prevalence only. Respondents were asked:

Adult Lifetime Prevalence: "Have you ever been told by a doctor, nurse, or other health professional that you had asthma?"

Adult Current Prevalence: "Do you still have asthma?"

Childhood Lifetime Prevalence: "Has a doctor, nurse, or other health professional ever said that the child has asthma?"

Childhood Current Prevalence: "Does the child still have asthma?"

Current asthma is defined as an affirmative response to both adult or child asthma prevalence questions.

4 - Hospitalization Rates

Hospitalization data for asthma are obtained from the Texas Health Care Information Collection, Inpatient Hospital Discharge Public Use Data File. All hospital records listing asthma (ICD–9: 493.0 – 493.9) as the primary diagnosis were selected from the database. Rates were calculated using population data obtained from the Texas CHS State Data Center.

Hospitalizations that were missing information on the age of the patient, including hospitalizations for HIV and drug/alcohol-use patients for which age is recorded as a range, were excluded from the analysis. Hospitalization rates may be underestimates of the true rate of hospitalization for asthma because some Texas hospitals are exempt from reporting. Exemption criteria can be found here: http://www.dshs.state.tx.us/THCIC/OutpatientFacilities/ExemptionCriteria.shtm. Additionally, because an individual can be hospitalized more than once for the same condition, these data represent the number of asthma hospitalizations, not the number of individuals hospitalized for asthma.

5 – Medicaid Utilization and Reimbursement

Medicaid utilization and reimbursement claims data were obtained from the Health and Human Services Commission. Fee-For-Service and Patient Care Case Management data were selected from the Texas Medicaid and Health Partnership (TMHP) Ad Hoc Query Platform (AHQP) Claims Universe. STAR and STAR Plus data were selected from TMHP ENC_Best Picture Universe. Episodes of care are defined as:

1. Inpatient Hospital Claims: A person admitted to an inpatient bed at a hospital.
2. Outpatient Hospital: A person who was not admitted as an inpatient but who is registered on a hospital or critical access hospital (CAH) records as an outpatient and received services directly from the hospital or CAH.
3. Physician Claims: A person who received services from a physician.

The Percentage of Repeat Visits are calculated as the percent of clients with more than one claim for an asthma diagnosis.