

**Obesity Prevalence Among Adults by Demographic Characteristics, Texas  
and U.S. and by Health Service Region and County, Texas, 2013**

**Data Requested by Christina Thi, MPH, RD, LD**

Obesity Prevention Coordinator  
Health Promotion and Chronic Disease Prevention Section  
Texas Department of State Health Services

**Data Request Prepared by Erin Wu, MPH  
Epidemiologist Team Lead**

Office of Surveillance, Evaluation and Research  
Health Promotion and Chronic Disease Prevention Section  
Texas Department of State Health Services

**Data Request Reviewed by Nimisha Bhakta, MPH  
Manager**

Office of Surveillance, Evaluation and Research  
Health Promotion and Chronic Disease Prevention Section  
Texas Department of State Health Services

**January 23, 2015**

Table 1. Obesity Prevalence Among Adults (18+ years) by Demographics, Health Service Region, and County and Texas, 2013

| Characteristics               | Estimated Number<br>of People | Prevalence (%) | 95% Confidence<br>Interval (CI) |       |
|-------------------------------|-------------------------------|----------------|---------------------------------|-------|
|                               |                               |                | Lower                           | Upper |
| Total                         | 5,545,084                     | 30.9           | 29.5                            | 32.3  |
| Race/Ethnicity                |                               |                |                                 |       |
| White only, non-Hispanic      | 2,310,111                     | 27.1           | 25.4                            | 28.9  |
| Black only, non-Hispanic      | 779,092                       | 38.8           | 33.8                            | 43.9  |
| Hispanic                      | 2,199,260                     | 36.5           | 33.7                            | 39.2  |
| Other race only, non-Hispanic | 91,322                        | 12.2           | 7.8                             | 16.6  |
| Multiracial                   | 70,054                        | 27.2           | 14.8                            | 39.6  |
| Annual Household Income       |                               |                |                                 |       |
| Less than \$15,000            | 825,736                       | 41.1           | 36.6                            | 45.6  |
| \$15,000 to < \$25,000        | 1,088,060                     | 35.1           | 31.5                            | 38.8  |
| \$25,000 to < \$35,000        | 523,237                       | 31.2           | 26.6                            | 35.9  |
| \$35,000 to < \$50,000        | 679,118                       | 32.0           | 27.4                            | 36.7  |
| \$50,000 or more              | 1,724,354                     | 26.8           | 24.7                            | 29.0  |
| Health Service Region         |                               |                |                                 |       |
| 1                             | 212,122                       | 32.5           | 27.0                            | 38.0  |
| 2                             | 99,107                        | 28.2           | 19.7                            | 36.7  |
| 3                             | 1,141,953                     | 28.9           | 25.7                            | 32.0  |
| 4                             | 265,765                       | 35.1           | 30.1                            | 40.1  |
| 5                             | 183,399                       | 34.0           | 26.4                            | 41.5  |
| 6                             | 1,024,548                     | 28.5           | 24.5                            | 32.6  |
| 7                             | 558,141                       | 29.3           | 25.5                            | 33.1  |
| 8                             | 644,903                       | 38.3           | 34.1                            | 42.5  |
| 9                             | 119,222                       | 33.2           | 27.0                            | 39.4  |
| 10                            | 158,113                       | 33.0           | 28.1                            | 38.0  |
| 11                            | 485,721                       | 41.1           | 36.3                            | 45.8  |
| County                        |                               |                |                                 |       |
| Bell                          | 62,298                        | 32.3           | 16.2                            | 48.4  |
| Bexar                         | 366,994                       | 34.7           | 29.7                            | 39.8  |
| Brazos                        | --                            | --             | --                              | --    |
| Cameron                       | 107,850                       | 43.9           | 31.6                            | 56.2  |
| Collin                        | 87,722                        | 19.7           | 11.5                            | 27.8  |
| Dallas                        | 432,460                       | 32.3           | 26.3                            | 38.3  |

Table 1. Obesity Prevalence Among Adults (18+ years) by Demographics, Health Service Region, and County and Texas, 2013 (continued)

| Characteristics    | Estimated Number<br>of People | Prevalence (%) | 95% Confidence<br>Interval (CI) |       |
|--------------------|-------------------------------|----------------|---------------------------------|-------|
|                    |                               |                | Lower                           | Upper |
| County (continued) |                               |                |                                 |       |
| Denton             | 61,181                        | 16.0           | 8.1                             | 23.9  |
| Ector              | 26,968                        | 31.4           | 22.5                            | 40.3  |
| El Paso            | 154,131                       | 33.2           | 28.1                            | 38.2  |
| Fort Bend          | 81,355                        | 19.8           | 15.2                            | 24.5  |
| Gregg              | 32,249                        | 37.4           | 25.9                            | 49.0  |
| Harris             | 714,043                       | 30.2           | 24.8                            | 35.7  |
| Hays               | --                            | --             | --                              | --    |
| Hidalgo            | 168,292                       | 35.8           | 30.0                            | 41.6  |
| Jefferson          | 70,652                        | 35.3           | 20.3                            | 50.4  |
| Johnson            | 36,706                        | 32.4           | 15.1                            | 49.7  |
| Lubbock            | 66,093                        | 34.3           | 27.7                            | 41.0  |
| McLennan           | 41,461                        | 35.3           | 19.4                            | 51.1  |
| Midland            | 34,355                        | 37.3           | 28.4                            | 46.2  |
| Montgomery         | 81,207                        | 34.1           | 18.8                            | 49.3  |
| Nueces             | 77,299                        | 48.0           | 35.7                            | 60.4  |
| Potter             | --                            | --             | --                              | --    |
| Randall            | 34,821                        | 31.1           | 16.6                            | 45.5  |
| Smith              | 42,382                        | 31.2           | 22.9                            | 39.5  |
| Tarrant            | 320,992                       | 29.2           | 23.8                            | 34.7  |
| Travis             | 159,121                       | 23.3           | 18.0                            | 28.6  |
| Williamson         | 78,007                        | 33.8           | 23.0                            | 44.5  |

**Data Source:** Texas Behavioral Risk Factor Surveillance System (BRFSS), 2013.

-- Estimate suppressed for small sample size (if numerator is < 5 or denominator is < 50) or is unreliable because the relative standard error is > 30%, calculated as standard error divided by the mean.

Obesity: Body mass index (BMI) greater than or equal to 30.

BMI was calculated as weight (kg) / [height (m)]<sup>2</sup> or weight (lb) / [height (in)]<sup>2</sup> x 703. Height and weight are obtained from the following two questions, "About how much do you weigh without shoes?" and "About how tall are you without shoes?".

### Interpretation for Table 1:

- According to the 2013 Texas Behavioral Risk Factor Surveillance System an estimated 30.9 percent of Texas adults were obese with a body mass index (BMI) of 30 or more.
- The prevalence of obesity in Texas was significantly higher among black adults at 38.8 percent (95% Confidence Interval (CI): 33.9-43.9) compared to whites at 27.1 percent (95% CI: 25.4-28.9) and other races at 12.2 percent (95% CI: 7.8-16.6).
- Obesity prevalence among adults in Texas was significantly higher among those with an annual household income less than \$15,000 at 41.1 percent (95% CI: 36.6-45.6) compared to adults with an income of \$50,000 or more at 26.8 percent (95% CI: 24.7-29.0).
- Obesity prevalence among adults in Texas was significantly higher among those in Health Service Region (HSR) 11 (41.1 percent; 95% CI: 36.3-45.8) and HSR 8 (38.3 percent; 95% CI: 34.1-42.5) compared to adults in HSR 6 (28.5 percent; 95% CI: 24.5-32.6), HSR 3 (28.9 percent; 95% CI: 25.7-32.0), and HSR 7 (29.3 percent; 95% CI: 25.5-33.1).
- Obesity prevalence was highest among adults in Nueces County at 48.0 percent (95% CI: 35.7-60.4) and Cameron County at 43.9 percent (95% CI: 31.6-56.2).
- Obesity prevalence was lowest among adults in Denton County at 16.0 percent (95% CI: 8.1-23.9), Collin County at 19.7 percent (95% CI: 11.5-27.8), and Fort Bend County at 19.8 percent (95% CI: 15.2-24.5).

Table 2. Obesity Prevalence Among Adults (18+ years) by Demographics, Nationwide (States, D.C. and Territories), 2013

| Characteristics               | Median (%) |
|-------------------------------|------------|
| Total                         | 28.9       |
| Race/Ethnicity                |            |
| White only, non-Hispanic      | 27.3       |
| Black only, non-Hispanic      | 37.9       |
| Hispanic                      | 31.2       |
| Other race only, non-Hispanic | 19.8       |
| Multiracial                   | 32.6       |
| Annual Household Income       |            |
| Less than \$15,000            | 33.3       |
| \$15,000 to < \$25,000        | 32.6       |
| \$25,000 to < \$35,000        | 30.1       |
| \$35,000 to < \$50,000        | 29.9       |
| \$50,000 or more              | 26.8       |

**Data Source:** U.S. Behavioral Risk Factor Surveillance System (BRFSS), 2013.  
 CDC BRFSS Prevalence and Trends Data available at: <http://apps.nccd.cdc.gov/brfss/index.asp>.  
 Obesity: Body mass index (BMI) greater than or equal to 30.  
 BMI was calculated as weight (kg) / [height (m)]<sup>2</sup> or weight (lb) / [height (in)]<sup>2</sup> x 703. Height and weight are obtained from the following two questions, "About how much do you weigh without shoes?" and "About how tall are you without shoes?".  
 Note: Data are from all 50 states, the District of Columbia, Guam, and Puerto Rico.

**Interpretation for Table 2:**

- According to the 2013 U.S. Behavioral Risk Factor Surveillance System an estimated 28.9 percent of U.S. adults were obese with a body mass index (BMI) of 30 or more.
- The prevalence of obesity in the U.S. was highest among black adults at 37.9 percent compared to whites at other races at 19.8 percent.
- Obesity prevalence among adults in the U.S. was highest among those with an annual household income less than \$15,000 at 33.3 percent compared to adults with an income of \$50,000 or more at 26.8 percent.

## Limitations of the data used in this report:

### BRFSS Prevalence Data

- Prevalence estimates from BRFSS may underestimate the true prevalence of obesity among adults because the survey relies on self-reported weight and height to calculate body mass index. If weight is underreported or height is overreported, obesity prevalence may be underestimated.
- Prevalence estimates could not be reported for some counties in Texas because survey sample sizes were too small to calculate reliable estimates in those counties.
- For U.S. BRFSS data, the estimated number of persons with obesity and confidence intervals for prevalence estimates were not available.
- Due to improvements in BRFSS sampling methodology and a change in weighting procedures used for the survey data beginning in 2011, 2013 BRFSS data cannot be compared to survey data from 2010 and earlier in order to assess trends. Shifts in prevalence estimates from 2010 and earlier compared to 2011 and later might not represent trends in prevalence in the population but instead merely reflect improved methods of measuring disease and risk factors. 2013 BRFSS data should only be compared to data from 2011 and 2012.