



TEXAS

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## **Prevalence of Obesity Among Adults, by Demographic Characteristics, Risk Factors / Comorbid Conditions, and Place of Residence, Texas, 2018**

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Table 1. Number and percentage of adults, age 18 years and older, by obesity status and demographic characteristics, Texas, 2018

Demographic Characteristics	Obese (BMI $\geq$ 30 kg/m <sup>2</sup> )							
	Yes				No			
	Estimated No. of Adults	%	95% CI		Estimated No. of Adults	%	95% CI	
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
Total Population	6,711,786	34.8	32.8	36.8	12,581,490	65.2	63.2	67.2
Sex								
Male	3,313,967	33.5	30.8	36.4	6,565,905	66.5	63.6	69.2
Female	3,388,648	36.2	33.4	39.1	5,978,993	63.8	60.9	66.6
Age (years)								
18 to 29	1,075,051	24.7	20.6	29.2	3,284,667	75.3	70.8	79.4
30 to 44	1,978,499	38.4	34.4	42.5	3,176,496	61.6	57.5	65.6
45 to 64	2,384,524	38.6	35.1	42.2	3,796,750	61.4	57.8	64.9
65 and older	1,193,109	35.6	31.5	39.9	2,159,901	64.4	60.1	68.5
Race/Ethnicity								
White	2,931,962	33.1	30.7	35.6	5,916,207	66.9	64.4	69.3
Black	906,660	39.6	33.6	45.9	1,382,756	60.4	54.1	66.4
Hispanic	2,540,514	38.6	34.5	42.8	4,043,637	61.4	57.2	65.5
Other/Multiracial	214,627	17.9	13.0	24.1	982,986	82.1	75.9	87.0
Education								
Less than high school graduate	1,235,869	39.6	33.4	46.1	1,885,987	60.4	53.9	66.6
High school graduate	1,791,234	36.1	32.2	40.1	3,171,173	63.9	59.9	67.8
Some college	2,192,729	36.1	32.6	39.8	3,878,472	63.9	60.2	67.4
College graduate	1,484,307	29.2	26.2	32.4	3,601,280	70.8	67.6	73.8
Annual Household Income								
Less than \$35,000	2,298,548	38.0	34.2	42.0	3,746,806	62.0	58.0	65.8
\$35,000-\$49,999	670,746	33.3	27.4	39.8	1,344,361	66.7	60.2	72.6
\$50,000-\$74,999	998,957	40.4	35.1	45.9	1,475,331	59.6	54.1	64.9
\$75,000 or more	1,733,847	30.6	27.5	33.8	3,933,052	69.4	66.2	72.5
Relationship Status								
Married or partner in an unmarried couple	3,793,246	35.1	32.5	37.8	7,015,768	64.9	62.2	67.5
Widowed	394,897	33.9	27.7	40.7	769,559	66.1	59.3	72.3
Divorced or separated	1,178,767	44.0	38.5	49.5	1,503,157	56.0	50.5	61.5
Never married	1,295,183	28.5	24.6	32.8	3,241,644	71.5	67.2	75.4
Sexual and/or Gender Minority								
Yes	160,319	35.2	26.3	45.1	295,568	64.8	54.9	73.7
No	4,080,951	38.5	35.9	41.2	6,519,271	61.5	58.8	64.1
Health Care Coverage								
Yes	5,145,210	34.3	32.1	36.5	9,859,238	65.7	63.5	67.9
No	1,525,532	36.7	31.9	41.7	2,632,155	63.3	58.3	68.1

Abbreviations: CI = confidence interval

Data Source: Texas Behavioral Risk Factor Surveillance System Public Use Data File, 2018, Texas Department of State Health Services, Center for Health Statistics, Austin, TX.

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Table 2. Number and percentage of adults, age 18 years and older, by obesity status and select risk factors and comorbid conditions, Texas, 2018

Risk Factors and Comorbid Conditions	Obese (BMI $\geq$ 30 kg/m <sup>2</sup> )							
	Yes				No			
	Estimated No. of Adults	%	95% CI		Estimated No. of Adults	%	95% CI	
			Lower Limit	Upper Limit			Lower Limit	Upper Limit
Total Population	6,711,786	34.8	32.8	36.8	12,581,490	65.2	63.2	67.2
Leisure Time Physical Activity								
Yes	4,491,986	31.0	28.8	33.2	10,017,047	69.0	66.8	71.2
No	2,218,039	46.5	42.0	51.0	2,554,883	53.5	49.0	58.0
Disability								
Yes	2,183,667	44.6	40.7	48.6	2,712,462	55.4	51.4	59.3
No	4,361,562	31.3	29.0	33.7	9,587,563	68.7	66.3	71.0
Diabetes								
Yes	1,315,061	54.7	49.0	60.3	1,089,021	45.3	39.7	51.0
No	5,388,647	32.0	29.9	34.1	11,463,153	68.0	65.9	70.1
Fell in Past Year								
Yes	1,184,402	44.2	39.1	49.5	1,493,758	55.8	50.5	60.9
No	2,228,956	34.4	31.3	37.7	4,245,927	65.6	62.3	68.7
Injured by Fall								
Yes	589,237	53.5	45.3	64.6	511,173	46.5	38.4	54.7
No	595,165	37.7	31.3	44.6	982,585	62.3	55.4	68.7
Cardiovascular Disease								
Yes	791,678	44.3	37.3	51.6	994,702	55.7	48.4	62.7
No	5,889,223	33.9	31.8	36.0	11,481,364	66.1	64.0	68.2
Heart Disease								
Yes	560,568	43.3	35.6	51.2	735,117	56.7	48.8	64.4
No	6,065,560	34.1	32.0	36.2	11,746,959	65.9	63.8	68.0
Stroke								
Yes	345,179	45.9	34.7	57.4	407,640	54.1	42.6	65.3
No	6,360,989	34.4	32.4	36.4	12,150,739	65.6	63.6	67.6
High Blood Pressure								
Yes	2,136,271	50.9	47.1	54.8	2,058,521	49.1	45.2	52.9
No	2,306,312	30.6	27.5	33.9	5,227,374	69.4	66.1	72.5
Cancer								
Yes	568,354	33.6	28.5	39.1	1,125,137	66.4	60.9	71.5
No	6,122,302	34.9	32.8	37.1	11,396,940	65.1	62.9	67.2
Current asthma								
Yes	719,996	49.5	42.8	56.3	733,107	50.5	43.7	57.2
No	5,945,274	33.7	31.6	35.9	11,692,137	66.3	64.1	68.4
Chronic Obstructive Pulmonary Disease (COPD)								
Yes	477,590	41.2	33.6	49.3	680,509	58.8	50.7	66.4
No	6,165,730	34.3	32.2	36.4	11,830,188	65.7	63.6	67.8

Table 2. Number and percentage of adults, age 18 years and older, by obesity status and select risk factors and comorbid conditions, Texas, 2018

Risk Factors and Comorbid Conditions	Obese (BMI $\geq$ 30 kg/m <sup>2</sup> )							
	Yes				No			
	Estimated No. of Adults	%	95% CI		Estimated No. of Adults	%	95% CI	
			Lower Limit	Upper Limit			Lower Limit	Upper Limit
Total Population	6,711,786	34.8	32.8	36.8	12,581,490	65.2	63.2	67.2
Kidney Disease								
Yes	417,850	58.2	46.4	69.0	300,640	41.8	31.0	53.6
No	6,273,637	33.9	31.9	35.9	12,253,100	66.1	64.1	68.1
Arthritis								
Yes	1,968,103	46.6	42.6	50.6	2,256,898	53.4	49.4	57.4
No	4,700,072	31.4	29.1	33.8	10,269,062	68.6	66.2	70.9
Depression								
Yes	1,291,967	40.9	36.5	45.4	1,868,456	59.1	54.6	63.5
No	5,393,638	33.7	31.5	36.0	10,610,639	66.3	64.0	68.5
Cigarette Smoking								
Current	1,047,372	37.5	32.0	43.3	1,746,256	62.5	56.7	68.0
Former	1,575,269	38.0	33.7	42.5	2,569,589	62.0	57.5	66.3
Never	3,917,502	33.1	30.7	35.7	7,908,397	66.9	64.3	69.3
Heavy Drinking								
Yes	421,232	35.8	28.4	44.0	755,211	64.2	56.0	71.6
No	5,891,956	35.0	32.9	37.2	10,932,992	65.0	62.8	67.1
Binge Drinking								
Yes	1,084,910	33.5	28.8	38.6	2,152,545	66.5	61.4	71.2
No	5,251,702	35.4	33.1	37.7	9,595,075	64.6	62.3	66.9

Abbreviations: CI = confidence interval

"--" data suppressed due to small sample size (N<50) or relative standard error  $\geq$  30%

Data Source: Texas Behavioral Risk Factor Surveillance System Public Use Data File, 2018, Texas Department of State Health Services, Center for Health Statistics, Austin, TX.

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Table 3. Number and percentage of adults, age 18 years and older, by obesity status and place of residence, Texas, 2018

Place of Residence	Obese (BMI $\geq$ 30 kg/m <sup>2</sup> )							
	Yes				No			
	Estimated No. of Adults	%	95% CI		Estimated No. of Adults	%	95% CI	
			Lower Limit	Upper Limit			Lower Limit	Upper Limit
Total Population	6,711,786	34.8	32.8	36.8	12,581,490	65.2	63.2	67.2
Public Health Region (PHR)								
1	153,542	38.4	24.7	54.2	246,237	61.6	45.8	75.3
2	96,941	30.5	19.7	44.0	220,664	69.5	56.0	80.3
3	1,235,781	35.6	31.5	39.9	2,235,467	64.4	60.1	68.5
4	202,471	36.4	25.6	48.8	353,176	63.6	51.2	74.4
5	200,433	48.5	38.6	58.6	212,635	51.5	41.4	61.4
6	896,568	40.5	33.1	48.3	1,316,857	59.5	51.7	66.9
7	624,760	31.8	28.1	35.9	1,336,816	68.2	64.1	71.9
8	561,925	39.9	33.6	46.5	847,429	60.1	53.5	66.4
9	158,864	41.1	26.7	57.2	227,760	58.9	42.8	73.3
10	171,410	34.9	28.8	41.4	320,013	65.1	58.6	71.2
11	446,110	39.3	30.7	48.6	688,558	60.7	51.4	69.3
U.S.-Mexico Border County (15)								
Yes	497,818	34.8	28.8	41.2	934,196	65.2	58.8	71.2
No	4,250,986	37.5	35.0	40.1	7,071,417	62.5	59.9	65.0
U.S.-Mexico Border County (32)								
Yes	554,745	36.4	30.5	42.8	967,930	63.6	57.2	69.5
No	4,194,059	37.3	34.8	39.9	7,037,683	62.7	60.1	65.2
Metropolitan Statistical Area (MSA)								
Austin-Round Rock	417,869	30.9	27.8	34.2	933,636	69.1	65.8	72.2
Beaumont-Port Arthur	105,229	55.5	39.7	70.4	84,218	44.5	29.6	60.3
College Station-Bryan	54,725	34.6	26.5	43.7	103,627	65.4	56.3	73.5
Dallas-Plano-Irving	695,003	33.0	27.5	39.1	1,410,644	67.0	60.9	72.5
El Paso	171,410	36.0	29.9	42.5	305,082	64.0	57.5	70.1
Fort Worth-Arlington	472,279	38.2	32.7	44.0	763,555	61.8	56.0	67.3
Houston-The Woodlands-								
Sugar Land	875,244	40.6	33.1	48.6	1,279,102	59.4	51.4	66.9
Killeen-Temple	91,177	46.1	24.8	69.0	106,452	53.9	31.0	75.2
McAllen-Edinburg-								
Mission	204,584	41.8	35.1	48.9	284,322	58.2	51.1	64.9
San Antonio-New								
Braunfels	427,795	38.3	31.8	45.1	690,411	61.7	54.9	68.2
Wichita Falls	17,452	31.7	25.4	38.8	37,542	68.3	61.2	74.6
County								
Anderson	--	--	--	--	--	--	--	--
Angelina	20,409	33.0	22.9	44.9	41,426	67.0	55.1	77.1
Bastrop	30,584	44.0	31.6	57.1	38,965	56.0	42.9	68.4
Bexar	312,772	37.3	30.2	45.1	524,727	62.7	54.9	69.8
Brazoria	--	--	--	--	--	--	--	--
Brazos	50,362	33.5	25.2	43.1	99,771	66.5	56.9	74.8
Caldwell	--	--	--	--	--	--	--	--
Collin	85,850	19.9	11.1	33.0	346,398	80.1	67.0	88.9
Comal	--	--	--	--	73,156	69.4	45.9	85.9
Dallas	340,369	32.9	25.3	41.6	693,068	67.1	58.4	74.7
Denton	142,122	42.6	28.7	57.8	191,167	57.4	42.2	71.3
El Paso	168,880	35.6	29.6	42.2	305,082	64.4	57.8	70.4
Ellis	--	--	--	--	67,014	61.8	38.4	80.7
Fort Bend	--	--	--	--	171,477	74.9	50.4	89.7
Galveston	79,719	36.2	30.2	42.7	140,213	63.8	57.3	69.8
Harris	527,562	40.8	30.7	51.7	766,431	59.2	48.3	69.3
Hays	41,439	30.4	23.1	38.9	94,722	69.6	61.1	76.9

Table 3. Number and percentage of adults, age 18 years and older, by obesity status and place of residence, Texas, 2018

Place of Residence	Obese (BMI $\geq$ 30 kg/m <sup>2</sup> )							
	Yes				No			
	Estimated No. of Adults	%	95% CI		Estimated No. of Adults	%	95% CI	
			Lower Limit	Upper Limit			Lower Limit	Upper Limit
Total Population	6,711,786	34.8	32.8	36.8	12,581,490	65.2	63.2	67.2
Henderson	46,322	75.4	48.3	91.0	--	--	--	--
Hidalgo	204,584	41.8	35.1	48.9	284,322	58.2	51.1	64.9
Jefferson	83,566	62.3	42.0	79.0	50,539	37.7	21.0	58.0
Johnson	48,118	46.3	30.3	63.1	55,819	53.7	36.9	69.7
Montgomery	105,338	53.2	28.0	76.9	92,752	46.8	23.1	72.0
Nacogdoches	14,087	33.6	20.6	49.8	27,806	66.4	50.2	79.4
Orange	13,829	42.6	26.9	59.9	18,665	57.4	40.1	73.1
Parker	--	--	--	--	--	--	--	--
Tarrant	355,225	36.3	30.0	43.2	622,956	63.7	56.8	70.0
Travis	224,579	29.4	25.3	33.9	539,566	70.6	66.1	74.7
Wichita	15,155	32.2	25.4	39.7	31,969	67.8	60.3	74.6
Williamson	113,374	32.0	25.7	39.0	240,967	68.0	61.0	74.3

Abbreviations: CI = confidence interval

"--" data suppressed due to small sample size (N<50) or relative standard error  $\geq$  30%

Only MSAs and counties with 50 or more respondents are listed here. Areas with fewer than 50 total respondents are excluded from all analyses.

Data Source: Texas Behavioral Risk Factor Surveillance System Public Use Data File, 2018, Texas Department of State Health Services, Center for Health Statistics, Austin, TX.

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## Technical Notes

Percentages for each measure were based on the number of respondents with a specific response(s) among the total number of respondents for the given survey question(s), excluding people with missing information or who refused or did not know the answer to the survey question(s). The following questions were used:

- *Sexual Orientation/Gender Minority*: A calculated variable; "Yes" if respondent replies "Lesbian or gay" or "Bisexual" to the question "Do you consider yourself to be straight, lesbian or gay, or bisexual?" OR replies "Yes" to the question "Do you consider yourself to be transgender?"; "No" if respondent replies "Straight" to the question "Do you consider yourself to be straight, lesbian or gay, or bisexual?" OR replies "No" to the question "Do you consider yourself to be transgender?".
- *Obesity*: Body mass index of 30 or more calculated from the questions, "About how much do you weigh without shoes?" and "About how tall are you without shoes?";
- *Health Care Coverage*: "Yes" and "No" responses to the question, "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare, or Indian Health Service?";
- *Leisure Time Physical Activity*: "Yes" and "No" responses to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?";
- *Disability*: "Yes" and "No" responses to the question, "Are you limited in any way in any activities because of physical, mental, or emotional problems?";
- *Diabetes*: "Yes" and "No" responses to the question, "Has a doctor, nurse, or other health professional ever told you that you have diabetes?" [Does not include female respondents who responded "Yes, but told only during pregnancy."];
- *Cardiovascular Disease*: "Yes" responses to any or "No" responses to all of the following questions, "Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?", or "Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?", or "Has a doctor, nurse, or other health professional ever told you that you had a stroke?";
- *Heart Disease*: "Yes" responses to either or "No" responses to both of the following questions, "Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?", or "Has a doctor, nurse, or other health professional ever told you that you had angina or coronary heart disease?";
- *Stroke*: "Yes" and "No" responses to the question, "Has a doctor, nurse, or other health professional ever told you that you had a stroke?";
- *High Blood Pressure*: "Yes" and "No" responses to the question, "Have you ever been told on two or more different visits by a doctor, nurse, or other health professional that you have high blood pressure?" ["No" includes respondents who responded "told borderline high or pre-hypertensive" and female respondents who responded, "Yes, but told only during pregnancy"];
- *Cancer*: "Yes" responses to either and "No" responses to both of the following questions, "Has a doctor, nurse, or other health professional ever told you that you had skin cancer?", or "Has a doctor, nurse, or other health professional ever told you that you had any other types of cancer?";

- *Asthma*: "Yes" responses to both of the following questions, or "Yes" responses to the first and "No" responses to the second question (indicating no current asthma), or "No" responses to the first question (indicating no current asthma), "Has a doctor, nurse, or other health professional ever told you that you had asthma?" and "Do you still have asthma?";
- *COPD*: "Yes" and "No" responses to the question, "Has a doctor, nurse, or other health professional ever told you that you have COPD (chronic obstructive pulmonary disease), emphysema, or chronic bronchitis?";
- *Kidney Disease*: "Yes" and "No" responses to the question, "Has a doctor, nurse, or other health professional ever told you that you have kidney disease? Do not include kidney stones, bladder infection or incontinence.";
- *Arthritis*: "Yes" and "No" responses to the question, "Has a doctor, nurse, or other health professional ever told you that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?";
- *Depression*: "Yes" and "No" responses to the question, "Has a doctor, nurse, or other health professional ever told you that you have a depressive disorder including depression, major depression, dysthymia, or minor depression?";
- *Fell in past year*: Calculated variable among respondents ages 45 years and older; "Yes" if answer to the question "In the past 12 month, how many times have you fallen?" was 1 or more, and "No" if the answer was "0";
- *Injured by fall*: Calculated variable among respondents ages 45 years and older who reported falling in the past year; "Yes" if answer to the question "How many of these falls caused an injury that limited your regular activities for at least a day or caused you to go see a doctor?" was 1 or more, and "No" if the answer was "0";
- *Cigarette Smoking*: "Yes" responses for current and former smokers and "No" responses for never smokers to the question, "Have you smoked at least 100 cigarettes in your entire life?" and responses of "Everyday" or "Some days" for current smokers and responses of "Not at all" for former smokers to the question, "Do you now smoke cigarettes every day, some days, or not at all?";
- *Heavy Drinking*: Responses of "2 or more" for men and "1 or more" for women to the question, "During the past 30 days, what is the largest number of drinks you had on any occasion?";
- *Binge Drinking*: Responses of "1 or more" times to the question, "Considering all types of alcoholic beverages, how many times during the past 30 days did you have (5 or more drinks for men, 4 or more drinks for women) on one occasion?";

Estimates were excluded (--) if they were considered unreliable because the sample size was too small, or if the relative standard error (RSE) was  $\geq 30.0$ .

Estimates were generated from one-way and two-way cross tabulations that used weighted data and accounted for the stratified survey design; therefore, the estimates calculated from survey data represent prevalence in the population.

Estimates were produced by the Chronic Disease Epidemiology Branch, Health Promotion and Chronic Disease Prevention Section, Community Health Improvement Division, Texas Department of State Health Services: October, 2019.

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