

TDC 2025 State Plan, 2023 Behavioral Risk Factor Surveillance System and Texas Health Care Information Collection Tables



TEXAS
Health and Human
Services

Texas Department of State
Health Services

Table of Contents

Table 1. Prevalence of Risk Factors and Comorbid Conditions by Diabetes Among Adults, Ages 18 Years and Older, Texas, 2023	3
Table 2: Diabetes Hospital Discharges, Median Length of Stay, and Total Charges by Primary Payment Source, Texas, 2023	5
Table 3: Diabetes-Related Nontraumatic Lower Extremity Amputation Hospital Discharges, Median Length of Stay, and Total Charges by Primary Payment Source, Texas, 2023	6
BRFSS Technical Notes	7
THCIC Technical Notes	11
General Information Page	12
Prepared by	12
Reviewed by	12
Suggested Citation	12

Table 1. Prevalence of Risk Factors and Comorbid Conditions by Diabetes Among Adults, Ages 18 Years and Older, Texas, 2023

	With Diabetes				Without Diabetes			
	Estimated No. of Adults	Crude Prevalence Estimate (%) ^a	95% CI Lower Limit	95% CI Upper Limit	Estimated No. of Adults	Crude Prevalence Estimate (%) ^a	95% CI Lower Limit	95% CI Upper Limit
Total Population	2,972,082	12.7	11.6	14.0	20,358,220	87.3	86.0	88.4
Binge Drinking								
Yes	345,554	12.7	8.4	18.7	3,211,580	17.6	16.0	19.3
No	2,379,521	87.3	81.3	91.6	15,051,921	82.4	80.7	84.0
Heavy Alcohol Use								
Yes	100,455	3.6	2.1	6.3	1,133,122	6.2	5.3	7.3
No	2,662,141	96.4	93.7	97.9	17,064,578	93.8	92.7	94.7
Arthritis								
Yes	1,176,328	39.7	35.2	44.4	3,713,312	18.3	16.9	19.7
No	1,784,193	60.3	55.6	64.8	16,582,385	81.7	80.3	83.1
Asthma (Current)								
Yes	340,336	11.5	8.9	14.8	1,621,368	8.0	7.0	9.1
No	2,614,771	88.5	85.2	91.1	18,634,647	92.0	90.9	93.0
Cancer								
Yes	491,651	16.6	12.6	21.6	1,365,880	6.7	6.0	7.5
No	2,461,847	83.4	78.4	87.4	18,892,850	93.3	92.5	94.0
Cardiovascular Disease								
Yes	581,762	19.9	16.6	23.6	1,236,375	6.1	5.4	7.0
No	2,343,067	80.1	76.4	83.4	18,964,878	93.9	93.0	94.6
COPD								
Yes	334,313	11.4	8.8	14.5	846,804	4.2	3.6	4.9
No	2,606,861	88.6	85.5	91.2	19,459,076	95.8	95.1	96.4
Disability								
Yes	1,504,569	52.6	47.5	57.6	5,212,006	27.4	25.6	29.3
No	1,356,317	47.4	42.4	52.5	13,808,009	72.6	70.7	74.4
Depression								
Yes	702,683	23.8	20.2	27.9	3,864,815	19.1	17.6	20.7
No	2,244,816	76.2	72.1	79.8	16,369,313	80.9	79.3	82.4
Doctor Recommended Sodium Reduction								
Yes	1,237,438	54.7	49.3	60.1	3,092,681	22.9	21.0	24.8
No	1,023,172	45.3	39.9	50.7	10,431,186	77.1	75.2	79.0
Heart Disease								
Yes	419,561	14.3	11.6	17.6	823,185	4.1	3.5	4.8
No	2,504,395	85.7	82.4	88.4	19,387,105	95.9	95.2	96.5
High Blood Pressure								
Yes	1,968,172	66.7	61.2	71.8	5,549,153	27.3	25.7	29.0
No	983,026	33.3	28.2	38.8	14,751,730	72.7	71.0	74.3

	With Diabetes				Without Diabetes			
	Estimated No. of Adults	Crude Prevalence Estimate (%) ^a	95% CI Lower Limit	95% CI Upper Limit	Estimated No. of Adults	Crude Prevalence Estimate (%) ^a	95% CI Lower Limit	95% CI Upper Limit
Total Population	2,972,082	12.7	11.6	14.0	20,358,220	87.3	86.0	88.4
High Cholesterol								
Yes	1,633,563	58.5	53.1	63.7	5,401,956	32.5	30.6	34.5
No	1,159,927	41.5	36.3	46.9	11,196,970	67.5	65.5	69.4
Kidney Disease								
Yes	328,137	11.1	8.6	14.2	491,359	2.4	2.0	3.0
No	2,630,870	88.9	85.8	91.4	19,782,517	97.6	97.0	98.0
Leisure Time Physical Activity^b								
Yes	1,820,099	61.4	56.6	66.0	15,010,534	73.9	72.1	75.7
No	1,142,943	38.6	34.0	43.4	5,293,887	26.1	24.3	27.9
Met Aerobic Recommendations^c								
Yes	121,160	9.6	5.9	15.2	1,732,123	24.7	21.8	27.7
No	1,142,943	90.4	84.8	94.1	5,293,887	75.3	72.3	78.2
Obesity (BMI ≥ 30 kg/m²)								
Yes	1,336,134	50.2	44.9	55.5	5,740,823	32.1	30.2	34.0
No	1,327,806	49.8	44.5	55.1	12,154,623	67.9	66.0	69.8
Stroke								
Yes	254,818	8.6	6.4	11.5	515,939	2.5	2.1	3.1
No	2,697,572	91.4	88.5	93.6	19,790,586	97.5	96.9	97.9
Cigarette Smoking								
Current	375,771	13.2	10.0	17.1	2,089,611	11.0	9.8	12.3
Former	767,418	26.9	22.8	31.5	3,809,058	20.1	18.6	21.6
Never	1,710,590	59.9	54.9	64.8	13,093,031	68.9	67.1	70.7
Any Current Tobacco Use								
Yes	569,254	20.3	15.6	26.0	3,464,969	18.4	16.9	20.1
No	2,229,922	79.7	74.0	84.4	15,339,292	81.6	79.9	83.1

Abbreviations: CI = confidence interval

"--" indicates that the data is suppressed either due to small sample size (N<50) or relative standard error ≥ 30%

Data Source: Texas Behavioral Risk Factor Surveillance System Public Use Data File, 2023, Texas Department of State Health Services, Center for Health Statistics, Austin, TX.

a: Denotes column percentages where the percentages are by diabetes status. A sample interpretation for arthritis is: Among adults living with diabetes, 39.7% have arthritis.

b: Leisure Time Physical Activity indicates physical activities or exercises done outside of the participant's regular job. Additional information is available in the technical notes.

c: Moderate-intensity aerobic activity ≥150 minutes/week and muscle-strengthening activity ≥2 days/week

Table 2: Diabetes Hospital Discharges, Median Length of Stay, and Total Charges by Primary Payment Source, Texas, 2023

Payer	Discharges	Percent of Discharges (%)	Median Length of Stay (Days)	Total Charges (\$)
Medicaid	6,765	10.5	3	511,257,347
Medicare	25,797	40.1	5	2,980,972,216
Private Insurance	19,225	29.9	3	1,562,352,569
Uninsured	10,412	16.2	3	701,725,977
Other	2,098	3.3	4	202,540,196
Total	64,297	100.0	4	5,958,848,304

Data Source: Texas Health Care Information Collection (THCIC), Inpatient Hospital Discharge Public Use Data File, 2023.

"--" indicates that fewer than 12 hospitalizations were reported, corresponding rates were not reported

Results do not include people living with HIV and those who reported drug/alcohol use.

Based on hospital records listing ICD-10 codes E10-E11, E13 as the principal diagnosis.

Table 3: Diabetes-Related Nontraumatic Lower Extremity Amputation Hospital Discharges, Median Length of Stay, and Total Charges by Primary Payment Source, Texas, 2023

Payer	Discharges	Percent of Discharges (%)	Median Length of Stay (Days)	Total Charges (\$)
Medicaid	1,153	7.2	9	185,418,181
Medicare	7,452	46.7	8	1,293,589,649
Private Insurance	4,408	27.6	7	620,622,754
Uninsured	2,435	15.3	8	316,125,001
Other	502	3.1	9	78,817,059
Total	15,950	100.0	8	2,494,572,645

Data Source: Texas Health Care Information Collection (THCIC), Inpatient Hospital Discharge Public Use Data File, 2023.

"--" indicates that fewer than 12 hospitalizations were reported, corresponding rates were not reported

Results do not include people living with HIV and those who reported drug/alcohol use.

Based on hospital records listing ICD-10 codes E10-E11, E13 as the principal diagnosis.

BRFSS 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 survey contained the following questions:

- *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*: Participants were included for analysis if they responded "Yes" to **any** of the following questions or "No" 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?"
- *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?"
- *Heavy Drinking*: A calculated variable from responses of "1 or more" to the question "During the past 30 days, how many days per week...did you have at least one drink of any alcoholic beverage, such as beer, wine, a malt beverage, or liquor?"; "Yes" and "No" responses to the question "Do you have more than 14 drinks per week" for men or "Do you have more than 7 drinks per week" for women
- *Binge Drinking*: A calculated variable from 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 X number of drinks (5 for men, 4 for women) on one occasion"; "Yes" and "No" responses to the question "Binge drinking"
- *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?"

- *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?"
- *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?"
- *High Cholesterol*: "Yes" and "No" responses to the question, "Have you ever been told by a doctor, nurse, or other health professional that your cholesterol is high?"
- *Doctor Recommended Sodium Reduction*: "Yes" and "No" responses to the question, "Has a doctor or other health professional ever advised you to reduce your sodium or salt intake?"
- *Disability*: A calculated variable from "Yes" and "No" responses to the questions, "Are you deaf or do you have serious difficulty hearing?", "Are you blind or do you have serious difficulty seeing, even when wearing glasses?", "Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?", "Do you have serious difficulty walking or climbing stairs?", "Do you have difficulty dressing or bathing?", "Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?"
- *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?"
- *Heart Disease*: Participants were included for analysis if they responded "Yes" to either of the following questions or "No" 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?"
- *High Blood Pressure*: Participants were included in analysis if they responded to the question, "Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?". Participants were

considered to have high blood pressure if they responded "Yes" and those who responded "Yes, but female told only during pregnancy", "No", or "Told borderline or pre-hypertensive" were considered to not have high blood pressure

- *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."
- *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?"
- *Met Aerobic Recommendations*: A calculated variable from various questions meeting the criteria of adequate physical activity (moderate-intensity aerobic activity ≥ 150 minutes/week and muscle-strengthening activity ≥ 2 days/week)
- *Obesity*: Body mass index of 30 kg/m^2 or more calculated from the questions, "About how much do you weigh without shoes?" and "About how tall are you without shoes?"
- *Stroke*: Participants were included for analysis if they responded "Yes" to the following question, "Has a doctor, nurse, or other health professional ever told you that you had a stroke?"
- *Cigarette Smoking*: A calculated variable. "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?"
- *Any Current Tobacco Use*: A calculated variable from the previous variable, Cigarette smoking, and "Yes" or "No" responses to the question, "Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?". Those who were considered current cigarette smokers were placed in the current tobacco use category.

Estimates were excluded (--) if they were considered unreliable because the sample size was too small or if the relative standard error (RSE) was $\geq 30\%$.

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. The estimated number of adults for the total population was derived from the 2023 BRFSS weighted calculations.

Estimates were produced by the Chronic Disease Epidemiology Branch, Health Promotion and Chronic Disease Prevention Section, Division for Disease Control and Prevention Services, Texas Department of State Health Services; January 2025.

THCIC Technical Notes

Population distributions were generated from the U.S. Census Bureau, Vintage 2023 Population Estimates.

Hospital discharge data and information on primary payment source were analyzed based off data from the Texas Health Care Information Council (THCIC).

For 2023 Texas patient-level information on Hospital Discharges, Inpatient Public Use Data Files (PUDF) were merged to create one dataset that was used for the analysis.

Texas Hospital Inpatient Discharge Public Use Data File, [Quarter 1 – Quarter 4, 2023]. Texas Department of State Health Services, Center for Health Statistics, Austin, Texas. [12/14/2023].

Discharge rates were suppressed if fewer than 12 hospitalizations were reported. Results do not include individuals positive for HIV or who are identified as drug/alcohol use patients. Discharges may not add up to total over discharges due to missing hospitalization data.

Age-adjusted rates were calculated by using weights based on the 2000 projected U.S. population in which those under 18 have an adjustment weight of 0.257736, those 18–44 years have 0.393797, those 45–54 years have 0.134834, those 55–64 years have 0.087247, 65–74 years have 0.066037, and lastly 75 years have an adjustment weight of 0.060349.

Diabetes Mellitus status was based on hospital records listing ICD-10 codes E10-E11, E13 as the principal diagnosis.

Type 1 Diabetes status was based on hospital records listing ICD-10 code E10 as the principal diagnosis.

Type 2 Diabetes status was based on hospital records listing ICD-10 code E11 as the principal diagnosis.

Diabetes-Related Nontraumatic Lower Extremity Amputation status was based on hospital records listing ICD-10 codes E10-E11, E13 as the principal diagnosis.

General Information Page

Prepared by

Jude Batoon, MPH
Epidemiologist Team Lead
Chronic Disease Epidemiology Branch
Health Promotion and Chronic Disease Prevention Section

Reviewed by

Justin Buendia, PhD
Manager
Chronic Disease Epidemiology Branch
Health Promotion and Chronic Disease Prevention Section



TEXAS

Health and Human Services

**Texas Department of State
Health Services**

Suggested Citation

Prevalence of Diabetes Among Adults, by Demographic Characteristics, Risk Factors / Comorbid Conditions, and Place of Residence, Texas, 2023. Prepared by Chronic Disease Epidemiology Branch, Health Promotion and Chronic Disease Prevention Section, Texas Department of State Health Services.

Crude and Age-Adjusted Diabetes Mellitus, Type 1 Diabetes, Type 2 Diabetes, and Diabetes-Related Nontraumatic Lower Extremity Amputation Hospital Discharge Rates, by Demographic Characteristics, Public Health Region and County, Texas, 2023. Prepared by Chronic Disease Epidemiology Branch, Health Promotion and Chronic Disease Prevention Section, Texas Department of State Health Services.

