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Diabetes in the U.S. and Tampa Bay Area

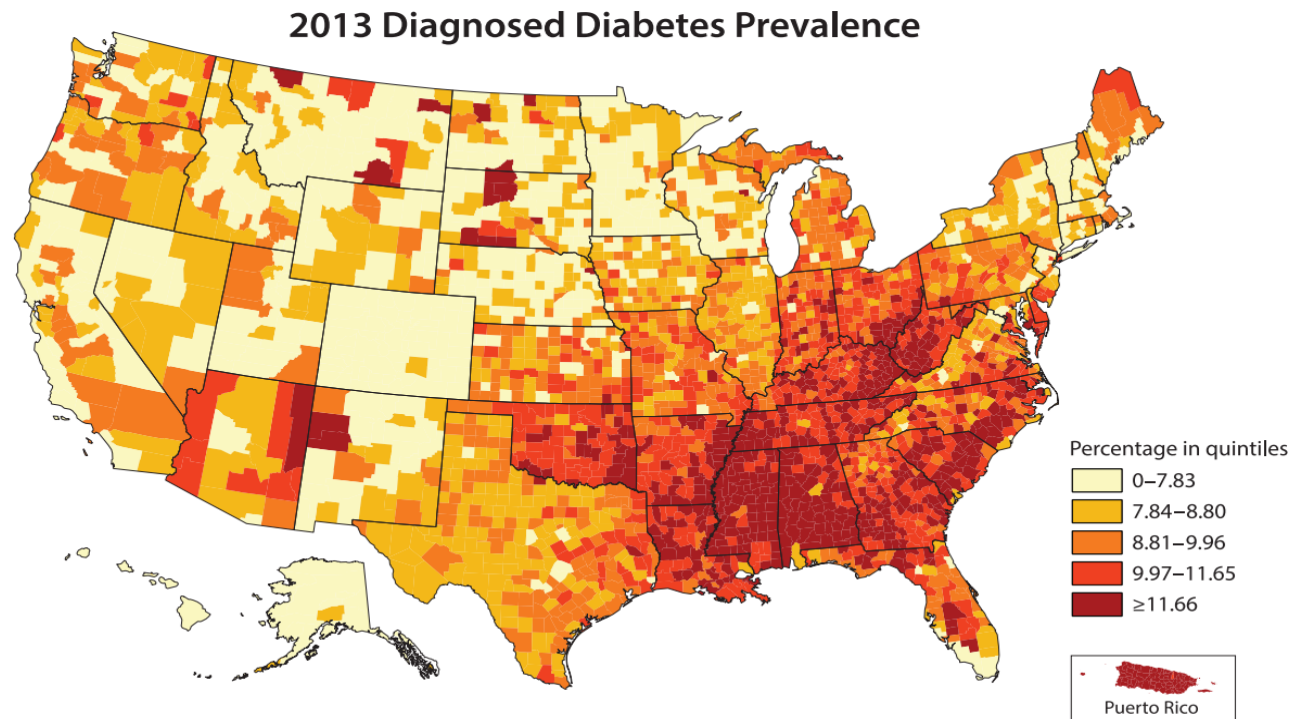
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National Prevalence of Diabetes

- ▶ 9.4% of the US population (30.3 million people of all ages) had diabetes in 2015
 - ▶ 7.2 million (23.8%) were undiagnosed cases
- ▶ Percentage of adults with diabetes increased with age-
 - ▶ Up to 25% among those aged ≥ 65 had diabetes
- ▶ Prevalence was higher among American Indians/Alaska Natives (15.1%), non-Hispanic blacks (12.7%), and people of Hispanic ethnicity (12.1%) than among non-Hispanic whites (7.4%) and Asians (8.0%)
- ▶ Prevalence varied significantly by education level, which is an indicator of socioeconomic status
 - ▶ 12.6% of adults with less than a high school education had diabetes
 - ▶ 9.5% of those with a high school education
 - ▶ 7.2% of those with more than a high school education

County-level Prevalence of Diagnosed Diabetes

- ▶ Age-adjusted for adults ≥ 20 years of age



Data source: United States Diabetes Surveillance System.

Prevalence of Prediabetes

- ▶ Estimated 33.9% of U.S. adults (84.1 million people) had prediabetes in 2015, based on their fasting glucose or A1C level.
- ▶ Nearly half (48.3%) of adults aged 65 years or older had prediabetes
- ▶ Among adults with prediabetes, only 11.6% reported being told by a health professional that they had this condition
- ▶ Annualized conversion rate for progressing to diabetes is 5%–10%

National Diabetes Statistics Report, 2017

Prediabetes: A high-risk state for developing diabetes. [Lancet. 2012 Jun 16; 379\(9833\): 2279–2290.](#)

Coexisting Conditions and Complications

- ▶ In 2014, ~7.2 million hospital discharges were reported with diabetes as any listed diagnosis among U.S. adults

Table 4. Number and rate of hospitalizations among adults aged ≥18 years with diagnosed diabetes for selected causes, United States, 2014

Cause of hospitalization	No. in thousands	Crude rate per 1,000 persons with diabetes (95% CI)
Diabetes as any listed diagnosis	7,155	327.2 (311.3–343.1)
Major cardiovascular disease	1,539	70.4 (66.8–73.9)
Ischemic heart disease	400	18.3 (17.3–19.3)
Stroke	251	11.5 (10.9–12.1)
Lower-extremity amputation	108	5.0 (4.7–5.2)
Diabetic ketoacidosis	168	7.7 (7.3–8.1)

CI = confidence interval.

Data source: United States Diabetes Surveillance System.

Costs

- ▶ The total direct and indirect estimated cost of diabetes in the United States in 2012 was \$245 billion
- ▶ \$1 in \$7 healthcare dollars is spent treating diabetes and its complications
- ▶ Average medical expenditures among people with diabetes were about 2.3 X higher than those without diabetes

Diabetes and CVD within Tampa Bay Area



Adults who have ever been told they had diabetes

County	Percent (%) using 2016 Stats	2018 Adult Population
Hernando	15.0	148,827
Hillsborough	13.2	1,170,878
Manatee	11.7	321,829
Pasco	11.0	423,604
Pinellas	10.5	847,561
Polk	14.7	568,333

Adults who have ever been told they had a Heart attack, angina, coronary heart disease or stroke

County	Percent (%) using 2016 Stats	2018 Adult Population
Hernando	18.3	148,827
Hillsborough	9.9	1,170,878
Manatee	12.6	321,829
Pasco	12.9	423,604
Pinellas	10.3	847,561
Polk	11.8	568,333

CV Disease and Diabetes

- ▶ T2DM reduces life expectancy by as much as 10 years,
 - ▶ 2/3 of deaths are attributable to CVD
- ▶ Compared to people without diabetes, there is :
 - ▶ 2-6X higher risk of mortality from CV events
 - ▶ 4x greater risk of CAD and stroke

1. International Diabetes Federation . idf diabetes atlas. 7. Brussels: International Diabetes Federation; 2015.
2. Low Wang CC, Hess CN, Hiatt WR, Goldfine AB. Clinical Update: cardiovascular disease in diabetes mellitus. Atherosclerotic cardiovascular disease and heart failure in type 2 diabetes mellitus—mechanisms, management, and clinical considerations. *Circulation*. 2016;133:2459-2502.
3. Fihn SD, Gardin JM, Abrams J, et al. 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS guideline for the diagnosis and management of patients with stable ischemic heart disease. *J Am Coll Cardiol*. 2012;60(24):e44-e164.
4. Lüscher TF, Creager MA, Beckman JA, Cosentino F. Diabetes and vascular disease: pathophysiology, clinical consequences, and medical therapy: part 2. *Circulation*. 2003;108:1655-1661