Cottage Center for Population Health

Santa Barbara County PUBLIC Health DEPARTMENT

Health Indicator Profile:
Diabetes

Diabetes occurs when the body does not produce enough insulin or cannot use its own insulin well enough to reduce sugar (glucose) levels in the blood. Adult, or type 2, diabetes occurs in adulthood, usually in people who are overweight or obese. Uncontrolled diabetes can lead to serious complications, such as blindness and other eye problems, kidney disease, neurological damage, hypertension, heart disease, stroke and certain cancers. Diabetes is the eighth leading cause of death in the United States, and the number of adults diagnosed has doubled over the past two decades as the population ages and has become more overweight.[1]

Findings from the 2022 Santa Barbara County CHNA

Measure

The prevalence of adult diabetes was measured by asking respondents if they had ever been told by a doctor or other health professional that they had diabetes (or "sugar diabetes;" female respondents were instructed to exclude pregnancy-related diabetes). Responses from persons who said they had "borderline" or "prediabetes" were excluded, so that valid comparisons could be made between Santa Barbara County data, the state and national estimates based on the 2017–March 2020 National Health and Nutrition Examination Survey.

DIABETES QUESTION

Have you ever been told by a doctor or other health professional that you have diabetes?

[1]Diabetes Quick Facts | Basics | Diabetes | CDC https://www.cdc.gov/diabetes/basics/quick-facts.html

Table 1. Percentage of Adults with Diabetes

	2016 Santa Barbara CHNA*	2019 Santa Barbara CHNA	2022 Santa Barbara CHNA	2021 California BRFSS	National Diabetes Statistical Report
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	%
Overall	8.9 (7.3, 10.5)	7.8 (5.7, 9.9)^	10.0 (7.4, 12.5)	11.6 (10.5, 12.6)	10.1
Male	7.8 (5.5, 10.2)	8.1 (5.0, 11.2)	13.4 (9.0, 17.9)	11.4 (10.0, 12.8)	
Female	9.9 (7.7, 12.2)^	7.6 (4.8, 10.4)	7.2 (4.3, 10.0)^	11.7 (10.1, 13.2)	
Hispanic	NA	9.4 (5.7, 13.2)	12.7 (7.0, 18.4)	13.3 (11.6, 15.0)	
Non-Hispanic White	NA	6.9 (4.3, 9.5)^	8.2 (5.5, 11.0)	9.2 (7.8, 10.6)	
Other	NA	5.8 (0.0, 12.9) †	9.3 (3.9, 14.7)	12.8 (10.0, 15.6)	
Age 18-44	3.6 (1.7, 5.4)^	2.4 (0.6, 4.1) †^	2.8 (0.7, 4.8)^†	3.8 (2.8, 4.8)^	
Age 45-64	13.8 (10.1, 17.5)	10.9 (2.3, 15.6)	18.2 (11.8, 24.5)^	15.9 (13.9, 17.9)^	
Age 65+	16.0 (12.5, 19.5)^	18.5 (12.4, 24.7)	12.3 (7.7, 16.9)	23.4 (20.2, 26.6)^	
< High School	16.1 (10.4, 21.8)^	13.9 (6.6, 21.2)	17.8 (6.5, 29.0)†	19.9 (16.7, 23.1)^	
High School Grad	10.0 (5.5, 14.5)	8.1 (3.3, 12.9) †	18.3 (8.5, 28.1)	10.1 (8.0, 12.1)	
Some College	7.4 (5.2, 9.6)^	8.2 (4.5, 11.9)	8.5 (5.2, 11.8)	12.1 (10.0, 14.3)	
College Grad	5.1 (3.5, 6.7)^	4.0 (2.1, 5.9)^	5.6 (3.1, 8.0)^	7.7 (6.3, 9.1)^	
<$35,000	11.5 (8.5, 14.5)	9.3 (5.4, 13.3)	13.1 (7.1, 19.1)	15.7 (13.5, 17.8)^	
$35,000-$74,999	9.7 (5.7, 13.8)	10.5 (5.2, 15.7)	9.5 (4.3, 14.7)	10.9 (8.5, 13.3)	
$75,000 or greater	4.3 (2.6, 5.9)^	4.9 (1.9, 7.9) ^†	9.0 (5.6, 12.4)	8.6 (7.0, 10.2)	

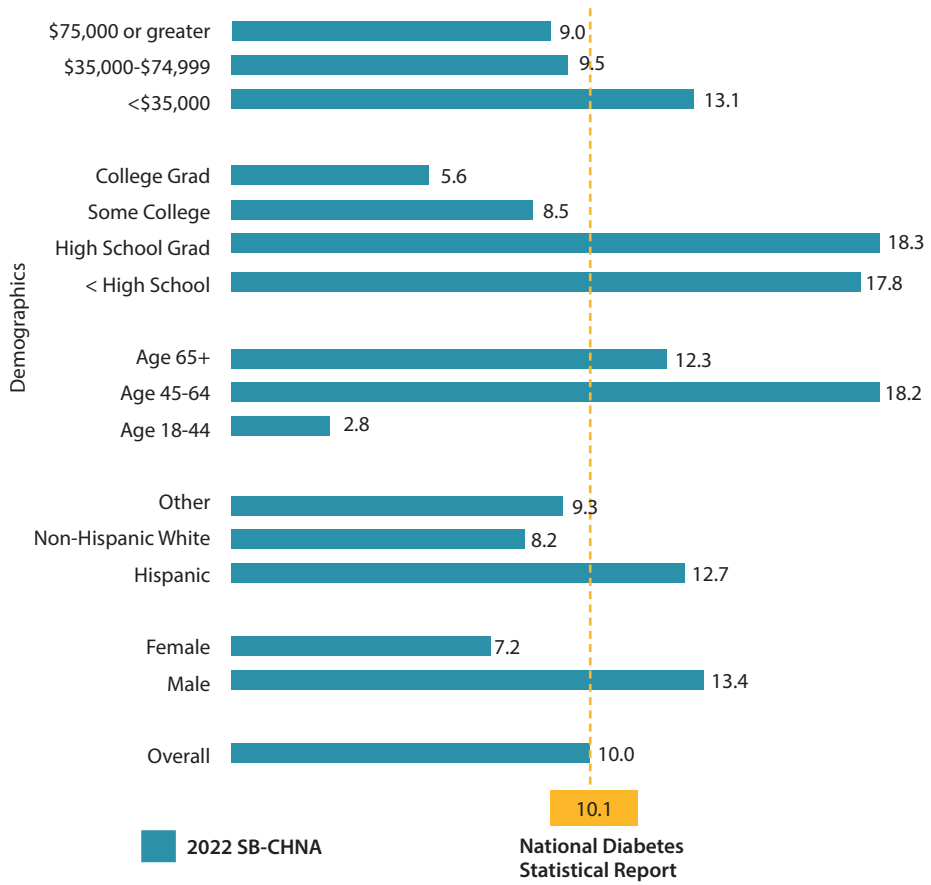
* Data from 2016 CHNA includes prediabetes.
^ Significant difference between estimate and national estimate
†Unreliable estimate (Relative Standard Error >0.3)

Health Disparities

In 2022, the percentage of Santa Barbara County adult residents with diabetes was similar to both the California and national estimates. Only three subgroups in Santa Barbara County were significantly at or below the target – females, those aged 18-44 and those graduating from college. Those aged 45 to 64 were significantly higher than the national estimate. Santa Barbara County in 2022 remains lower than Californians in 2021, with females and those aged 65 years and older having significantly lower estimates of diabetes when compared to their counterparts at the state level.

Most impacted demographic subgroups include males, Hispanics, those aged 45 years or older, those with high school education or less, and those with household incomes below $35,000 (see figures below).

Figure 1. 2022 Percent Reporting Diabetes by Demographic Group



Factors and Health Outcomes Associated with Diabetes

Obesity was the main factor associated with reporting a diagnosis of diabetes. Approximately 20% of those with obesity reported a diagnosis of diabetes compared to 10% of all adults in the county. While controlling for demographics, the odds of reporting diabetes were increased five-fold when also reporting obesity (Table 2).

Table 2. Odds Ratio Estimates for Diabetes by Significant Related Factor

Significant Related Factor	Point Estimate	95% Confidence Limits	
Obesity	5.6	2.8	11.3

NOTE: The degrees of freedom in computing the confidence limits is 1445.

Findings from the 2022 Santa Barbara County Listening Tour

Listening Tour participants repeatedly identified the multiple health risks that coincide with diabetes. These **risks worsened during the pandemic** and affected daily life of residents, particularly the most vulnerable.

Increase in Gestational Diabetes

Participants highlighted the increase in gestational diabetes, which could negatively impact maternal and birth outcomes and increase the tasks that must be addressed during doctors' visits. Navigating gestational diabetes can be challenging, especially for communities who struggle with literacy and access to resources.

> *So people who aren't diabetic, maybe when they're not pregnant, they get pregnant, and they're diabetic. Well, that can be controlled. We have great strategies for controlling diabetes and pregnancy, but you got to poke your finger after every meal, and you got to write the number down. For someone who can't read and write, transcribing what's on that machine onto a paper is a huge job. – Physician*

Further, physicians and health service providers expressed the importance of using doctors visits, such as pregnancy visits, as educational opportunities to share practices to prevent and manage diabetes. They talked about the importance of preventative education and the positive effects that it can have on the health of patients.

> *We see a good amount of gestational diabetes that it's becoming more and more of a problem and ends up being a big part of what we're doing. In terms of moms' health, it's just supporting them and controlling blood sugar because it does usually go away after pregnancy, but it has ramifications later on. It makes you at higher risk for type 2 diabetes, and there's a lot of health education involved in that, dietary guidelines, and exercise and lifestyle things. So, I would say that's pretty probable, and pregnancy is a good time to capture that and talk about it. – Maternal Service Provider*

Financial and Emotional Burden of Diabetes

Findings show that **diabetes adds to the stress of people's lives** by worrying about medicine, doctor's appointments, payment options, and even immigration status. Participants shared having longer wait times to receive medication because of shortages and how it affected their everyday life and health. Further, participants shared regarding how immigration status prevented them from seeking care, often leaving their diabetes unattended.

> *Mi esposo es diabetico y tiene otras situaciones de salud y necesita tomar mucha medicina. Entonces la medicina también se retrasó en este. La pedía y no llegaba o se la estaban limitando. No más le daban por decir si necesitaba tres diferentes, no más le daban dos o una porque era lo que había.*
>
> *My husband is diabetic and has other health situations, and he needs to take a lot of medicine. So the medicine was also late. He would ask for it, and it wouldn't come, or it was being limited. They just gave him, per se, if he needed three different ones, they would just give him two or one because that was what was available. – Hospital Services*

> *A lo mejor la persona se queda con diabetes, y una preocupación puede ser un estatus migratorio después de ahí un seguro médico que no tiene en respecto a eso.*
>
> *Maybe that person gets stuck with diabetes, and one of their worries can be their migrant status. And after that, health insurance and not having it can be a stressor in regards to that. – South County Promotores*

Conclusion

Diabetes was emphasized as adding to the difficulties of the community. Diabetes often requires an increase in regular doctors' visits, consistent blood sugar level monitoring, and controlled eating habits; thus creating additional burdens, such as more financial expenses, increased need to request time off, and a higher risk of COVID-19. More preventative education could work in advance of the onset of illness to slow or reverse the increasing rates of diabetes, especially among vulnerable populations.