

Disparities in Diabetes Care

An Analysis of the Indiana Behavioral Risk Factor Surveillance System Diabetes Module



August 2023

Diabetes in the United States

According to CDC, diabetes is the eighth leading cause of death in the United States¹, and 11.3% of the United States' population had diabetes in 2022.² Individuals from historically marginalized racial and ethnic backgrounds are disproportionately impacted by diabetes with higher overall prevalence and rates of complications.^{3,4} In 2017, an estimated 80% of youth with type 2 diabetes in the United States were from historically marginalized racial or ethnic backgrounds.⁵

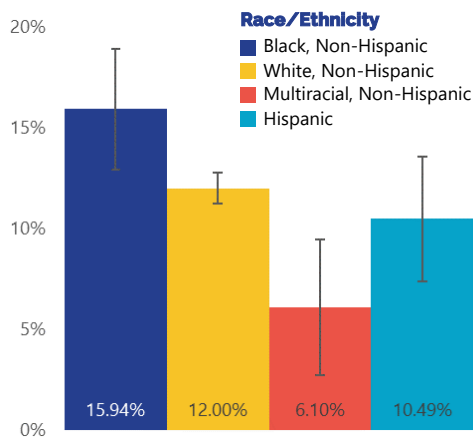
Diabetes in Indiana

Using the Behavioral Risk Factor Surveillance System (BRFSS), the estimated prevalence of diabetes in Indiana in 2021 was 12.13%. The prevalence of diabetes among Black, non-Hispanic Hoosiers was higher than that of White, non-Hispanic Hoosiers and the prevalence of diabetes among White, non-Hispanic Hoosiers was higher than that of Multiracial, Non-Hispanic Hoosiers in 2021. Diabetes also had a higher prevalence among Hoosiers whose household income was less than \$15,000 compared to Hoosiers whose household income was \$50,000 or more in 2021.

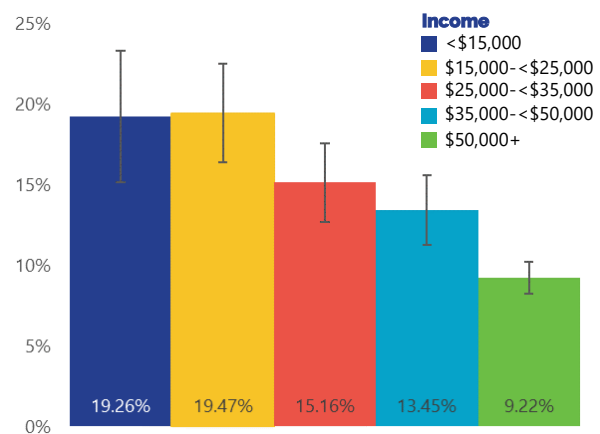
Fast Facts

- An estimated **12%** of Indiana's population had diabetes in 2021.
- In 2021, Hoosiers were diagnosed with diabetes at an average age of **47 years**.

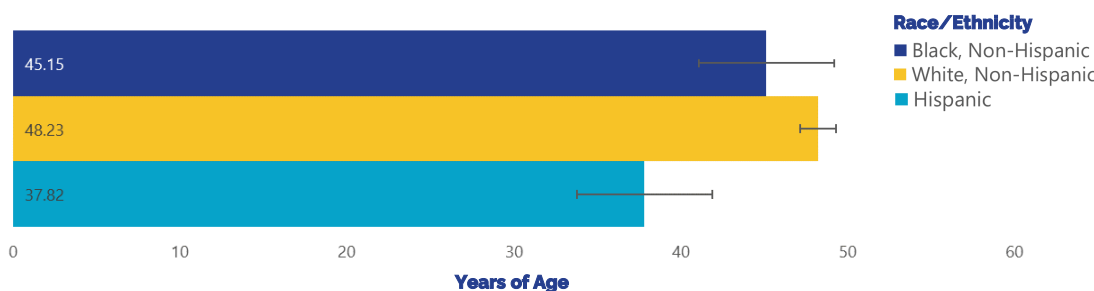
Prevalence of Diabetes in Indiana by Race and Ethnicity in 2021



Prevalence of Diabetes in Indiana by Income in 2021



Average Age of Diabetes Diagnosis in Indiana by Race and Ethnicity in 2021



In 2021, Hispanic individuals were diagnosed with diabetes at a younger age on average than White, non-Hispanic individuals.

Diabetes Health Care in Indiana

The BRFSS diabetes module asks respondents questions regarding the health care they utilize to manage their diabetes. Question topics include: seeing a doctor or health professional for diabetes care, use of insulin, and utilization of diabetes management courses.

Diabetes Health Care in Indiana by Race and Ethnicity*

Compared to White, non-Hispanic Hoosiers, Hispanic Hoosiers with diabetes had higher rates of:

- **NOT** having seen a doctor or health professional for their diabetes in the past 12 months.
- **NOT** having A1C checked by a doctor or health professional in the past 12 months.
- **NOT** taking insulin.
- **NOT** having ever taken a course or class on how to manage diabetes.
- Having diabetes affect their eyes or **having retinopathy**.

*See appendix for more detailed data.

Diabetes Health Care in Indiana by Income*

Compared to Hoosiers whose household income was greater than \$50,000, Hoosiers with diabetes whose household income was less than \$15,000 had higher rates of:

- **NOT** having A1C checked by a doctor or health professional in the past 12 months.
- Taking insulin.
- **NOT** having an eye exam in which the pupils were dilated in the past 12 months.
- **NOT** having ever taken a course or class on how to manage diabetes.
- Having diabetes affect their eyes or **having retinopathy**.

Summary

Diabetes in Indiana and the United States disproportionately affects individuals from historically marginalized racial and ethnic groups and lower household income. The BRFSS diabetes module provides additional insight into the disparities present in the treatment and management of diabetes. The combined data from 2015 to 2021 shows adverse impact on Hispanic and low income Hoosiers with regards to access to and utilization of diabetes health care.

Health complications of diabetes include heart disease, stroke, chronic kidney disease, other complications with feet, oral health, vision, hearing, and mental health, and even death.^{6,7}

The access and utilization of diabetes care and education impacts an individual's ability to avoid health complications.⁶

References

1. Diabetes quick facts. Centers for Disease Control and Prevention. April 4, 2023. <https://www.cdc.gov/diabetes/basics/quick-facts.html>.
2. By the numbers: diabetes in America. Centers for Disease Control and Prevention. October 25, 2022. <https://www.cdc.gov/diabetes/health-equity/diabetes-by-the-numbers.html>.
3. Advancing health equity. Centers for Disease Control and Prevention. May 4, 2023. <https://www.cdc.gov/diabetes/health-equity/index.html>.
4. Peek ME, Cargill A, Huang ES. Diabetes health disparities: a systematic review of health care interventions. *Med Care Res Rev*. 2007;64(5 Suppl):1015-56S. doi:10.1177/1077558707305409
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6. Prevent diabetes complications. Centers for Disease Control and Prevention. November 3, 2022. <https://www.cdc.gov/diabetes/managing/problems.html#:~:text=Common%20diabetes%20health%20complications%20include,how%20to%20improve%20overall%20health.>
7. The burden of diabetes in Indiana. American Diabetes Association. October 2021. https://diabetes.org/sites/default/files/2021-11/ADV_2021_State_Fact_sheets_Indiana_rev.pdf.

For additional information on Indiana BRFSS:

<https://www.in.gov/health/oda/behavioral-risk-factor-surveillance-system/>

The calculations on this page use combined data from 2015-2021.

Although analyses were completed for the commonly analyzed BRFSS demographic variables, this fact sheet only includes demographics where the findings were statistically significant.



Appendix*

Rates of Hoosiers with diabetes that:

Have seen a doctor for their diabetes in the past 12 months:

Demographic	Prevalence Rate	Lower Confidence Limit	Upper Confidence Limit
Hispanic/Latino	79.22%	71.76%	86.66%
White, Non-Hispanic	88.64%	87.59%	89.68%

Have had their A1C checked by a doctor or health professional in the past 12 months:

Demographic	Prevalence Rate	Lower Confidence Limit	Upper Confidence Limit
Hispanic/Latino	77.44%	69.58%	85.31%
White, Non-Hispanic	93.91%	93.05%	94.78%
Household Income <\$15,000	88.75%	85.15%	92.36%
Household Income \$50,000+	95.06%	93.61%	96.50%

Have had an eye exam in which the pupils were dilated in the past 12 months:

Demographic	Prevalence Rate	Lower Confidence Limit	Upper Confidence Limit
Household Income <\$15,000	39.17%	34.86%	43.47%
Household Income \$50,000+	49.18%	46.61%	51.95%

Take insulin:

Demographic	Prevalence Rate	Lower Confidence Limit	Upper Confidence Limit
Hispanic/Latino	25.35%	19.14%	31.55%
White, Non-Hispanic	35.16%	33.62%	36.71%
Household Income <\$15,000	41.10%	36.71%	45.49%
Household Income \$50,000+	30.39%	27.77%	33.01%

Have ever taken a course or class on how to manage their diabetes:

Demographic	Prevalence Rate	Lower Confidence Limit	Upper Confidence Limit
Hispanic/Latino	44.88%	37.12%	52.65%
White, Non-Hispanic	58.69%	57.12%	60.27%
Household Income <\$15,000	51.72%	47.17%	56.27%
Household Income \$50,000+	63.76%	61.12%	66.41%

Have ever had diabetes affect their eyes or had retinopathy:

Demographic	Prevalence Rate	Lower Confidence Limit	Upper Confidence Limit
Hispanic/Latino	25.50%	18.95%	32.06%
White, Non-Hispanic	16.93%	15.73%	18.12%
Household Income <\$15,000	26.21%	22.40%	30.02%
Household Income \$50,000+	12.18%	10.39%	13.97%

For additional information on the Indiana Behavioral Risk Factor Surveillance System:
<https://www.in.gov/health/oda/behavioral-risk-factor-surveillance-system/>

The calculations on this page use combined data from 2015-2021.

*Only includes rates referenced in this fact sheet due to caution in interpreting BRFSS estimates.

