

# **Diabetes**

## **About**

Diabetes is a disease in which blood glucose levels are above normal. When we eat, our bodies turn the food we eat into glucose, which is a type of sugar. The pancreas, an organ near the stomach, creates a hormone called insulin that helps glucose get into cells where it can be used for energy. When you have diabetes, your body either doesn't make enough insulin or doesn't use insulin as well as it should, causing sugar to build up in the body. Insulin levels also affect carbohydrate, lipid, protein and mineral metabolism. Problems with insulin signaling can therefore have widespread and serious effects on other tissues and organs disrupting important systems and functions.

## **About the Measures**

There are three main types of diabetes:

- Type 1 diabetes
- Type 2 diabetes
- Gestational diabetes

Type 1 diabetes results from the body's failure to produce insulin requiring the person to inject insulin or wear an insulin pump. This form was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes. Type 2 diabetes results from insulin resistance, a condition in which cells fail to use insulin properly, sometimes combined with an absolute insulin deficiency. This form was previously referred to as non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes. Gestational diabetes occurs when pregnant women without a previous diagnosis of diabetes develop a high blood glucose level. It may precede development of type 2 DM. Other forms of diabetes may result from specific genetic syndromes, surgery, drugs, malnutrition, infections, and other illnesses.

The LDH Health Data Portal tracks the age-adjusted percentage of adults ages 20 and older with diabetes, excluding gestational diabetes.

## **About the Data**

These data come from the Centers of Disease Control and Prevention Behavioral Risk Factor Surveillance System (BRFSS) through the National Center for Chronic Disease Prevention Division of Diabetes Translation. BRFSS conducts a national random digit dial telephone survey. Data obtained from the BRFSS are representative of the total non-institutionalized population over 18 years of age living in households with a land line telephone. Data from the BRFSS are used to measure various health behaviors and health-related quality of life (HRQOL) indicators. BRFSS data is weighted by population and the HRQOL measures were age-adjusted. Except for 2011, the public use final weight variable was used to produce estimates. These weights ensure state level estimates reflect the age-sex-race distributions of the state. These weights might not always provide accurate parish level estimates; particularly when parish age-sex-race distributions vary greatly from that of the state. Methodology for BRFSS changed in 2011; the survey began collecting data from cellphone respondents in addition to the traditionally collected landline data. As a result, for 2011 BRFSS data, a post stratification weight was calculated using the aforementioned approach for landline respondents -only. Other publically available BRFSS data for 2011 include cellphone respondents and are based on a revised weighting

methodology—consequently these estimates should not be compared to data from prior years or to the estimates.

Parish-level estimates are restricted to adults aged 20 years and older that were developed using modern small area estimation techniques. This approach employs a Bayesian multilevel modeling technique that borrows strength in making an estimate for one parish from BRFSS data collected in other parishes. Three years of data were used to improve the precision of year specific small area estimates.

## **Disclaimer**

Data are intended to spur further research and should be used only as a starting point to understanding how the environment and other contributing factors may be connected to disease. Datasets presented on this site are intended to answer some basic questions, but should ultimately lead to further inquiry and more detailed study.

Data limitations should be noted if conducting exploratory ecological studies with these data. Limitations may include data gaps, reporting discrepancies (for example, a disruption of reporting or instrument recording following hurricanes) and insufficient data on all potentially confounding factors. There are numerous additional factors which may contribute to disease onset. These include genetics, access to health care, existing health conditions, medicines, other chemical substances we come into contact with or ingest, nutrition, route and duration of exposure, level of activity, level of stress, and many others.

Responsible use of this data therefore requires exercising caution when drawing conclusions based solely on views of the limited available data. Any perceived relationship, trend, or pattern apparent in the data should not be interpreted to imply causation; may in fact be unrelated; and should be regarded as preliminary, and potentially erroneous, until more in-depth study and if applicable, statistical evaluation, can be applied. The LDH Bureau of Health Informatics and Environmental Public Health Tracking Program cannot guarantee the completeness of the information contained in these datasets and expressly disclaim liability for errors and omissions in their content.

## **Data Sources**

- [CDC Division of Diabetes Translation](#)
- [Robert Wood Johnson Foundation County Health Rankings & Roadmaps](#)

## **Additional Information**

- [CDC - Diabetes](#)
- [American Diabetes Association](#)
- [International Diabetes Federation - Diabetes Atlas](#)
- [National Diabetes Education Program](#)

## Questions

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