## ACT for NIH

## DIABETES

New cases of diagnosed diabetes have decreased 35 percent in the U.S. – from 1.7 million new cases/year in 2008 to 1.3 million new cases/year in 2017. NIH-supported research on prevention and treatment has been instrumental in this decline.

**Diabetes** is a disease that occurs when your pancreas does not produce enough insulin to allow your body to capture and use glucose for energy and your blood sugar is too high.

**Type 1 Diabetes:** Typically diagnosed in children and young adults.

**Type 2 Diabetes:** Most common among middle-aged and older adults and accounts for 90-95% of cases nationwide.



**34.2 million Americans** have diabetes. (~1 out of 10)



**210,000 American youth** (age 20 or younger) live with diabetes.



African Americans and Hispanics are >50% more likely to have diabetes than non-Hispanic whites.



**1 in 7 health care dollars** is spent treating diabetes and its complications.

People with diabetes are **more likely to suffer** from stroke, heart disease, high blood pressure, kidney failure, gum disease, depression, and other illnesses.

> American Diabetes Association. Fast Facts - Data and Statistics About Diabetes. (2020)



Decades of NIH-funded discoveries have helped prevent and manage diabetes. These include:

- **Glucose monitors and insulin pumps** that deliver rapid-acting insulin allow individuals with type 1 diabetes to live longer and healthier lives.
- The identification of over 400 genetic regions that may affect risk for type 2 diabetes.
- Evidence that type 2 diabetes can be delayed or prevented by basic lifestyle interventions, such as weight loss and exercise; and type 1 diabetes can be delayed with early preventative treatment.
- An artificial pancreas system that improves type 1 diabetes management by helping control blood glucose levels and reducing the daily burden of the disease.

## Today, NIH-funded researchers are:

- Studying genetic and environmental factors that contribute to diabetes progression.
- **Identifying new methods** to improve blood glucose monitoring and insulin delivery in type 1 diabetes.
- **Examining behavioral approaches** to prevent and manage type 2 diabetes.
- Uncovering the fundamental cellular and molecular pathways underlying the development of diabetes and its complications.

Sources: Centers for Disease Control. (2019). Retrieved from <a href="http://www.cidc.gov/media/releases/2019/p0529-diabetes-cases-decline.html">www.cidc.gov/media/releases/2019/p0529-diabetes-cases-decline.html</a>; National Institute of Diabetes and Digestive and Kidney Disease. Retrieved from <a href="http://www.niddk.nih.gov/about-niddk/strategic-plans-reports/niddk-recent-advances-emerging-opportunities">www.niddk.nih.gov/about-niddk/strategic-plans-reports/niddk-recent-advances-emerging-opportunities;</a>; National Institutes of Health (2019). Retrieved from <a href="http://www.nih.gov/news-releases/artificial-pancreas-system-better-controls-blood-glucose-levels-current-technology">www.nih.gov/news-releases/artificial-pancreas-system-better-controls-blood-glucose-levels-current-technology</a>

The decline in new diagnoses is a sign that efforts to stop the nation's diabetes epidemic are working. But continued progress depends on NIH funding growing reliably every year.