

# Investment in research saves lives and money



facts about:

## Diabetes

*"If you think research is expensive, try disease."*

— Mary Lasker 1901–1994

### Today:

- ⌘ Nearly 24 million Americans have diabetes. About 186,000 are under the age of 20.
- ⌘ The soaring rate of childhood obesity is an important factor in the rising incidence of type 2 diabetes in American youth.
- ⌘ Diabetes was the 7th leading cause of death in the United States in 2006.
- ⌘ African American, Hispanic, American Indian and Alaska Native adults are twice as likely as white adults to suffer from diabetes.
- ⌘ People with diabetes are more likely to suffer from heart disease, stroke, high blood pressure, blindness, kidney failure, gum disease, depression and other illnesses.

SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION (WWW.CDC.GOV)  
NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES (WWW.NIDDK.NIH.GOV)  
AMERICAN DIABETES ASSOCIATION (WWW.DIABETES.ORG)

### The Costs:

- ⌘ Diabetes cost the U.S. \$174 billion in 2007: \$116 billion for direct health care costs and \$58 billion for lost productivity and premature death.
- ⌘ One out of every \$5 spent on health care in the U.S. is used to care for someone with diabetes.

SOURCE: AMERICAN DIABETES ASSOCIATION. DIABETES CARE. 2008; 31: 1-20.

SAVING LIVES  
SAVING MONEY

### HOW RESEARCH SAVES LIVES:

- ⌘ Recent research shows that people at high risk for diabetes can reduce their risk of developing type 2 diabetes by more than half by losing 5-7% of their body weight and getting 2 ½ hours of physical activity a week.
- ⌘ Studies have shown that careful control of blood sugar levels reduces the risk of eye, kidney and nerve disease by 40% for people with type 1 or type 2 diabetes.

SOURCE: SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION (WWW.CDC.GOV)

### HOW RESEARCH SAVES MONEY:

- ⌘ Researchers have shown that if the U.S. reduces type 2 diabetes and high blood pressure rates by 5%, health care costs can be reduced by \$5 billion.\*
- ⌘ A 20% increase in the use of diabetes medicines would yield \$7.10 in return for every dollar spent on medication because of a reduction in overall health care costs for people with diabetes.\*\*

SOURCE: \*\*"PREVENTION FOR A HEALTHY AMERICA," TRUST FOR AMERICA'S HEALTH, JULY 2008 (WWW.HEALTHYAMERICANS.ORG)

\*\*SOKOL, M.C. ET AL. MEDICAL CARE. 2005, 43(6):521-530.

## survivor



NAME: BRYAN MOORE

AGE: 15

DISEASE: DIABETES

TYPE: 2

Bryan Moore is a high school sophomore at Milford Mill Academy in Pikesville, MD. When he's not busy with school or football practice, he enjoys playing other sports, going to the mall and talking on the phone with friends. Like a growing number of American teenagers, Bryan also regularly checks his blood sugar level and gives himself insulin to manage type 2 diabetes.

Two years ago, Bryan found himself sleeping excessively and repeatedly going to the restroom. A hospital visit confirmed that his blood sugar was dangerously high. He was diagnosed with type 2 diabetes—a disease he knew ran in both of his parents' families. Since then, Bryan has worked hard to drop nearly 80 pounds by changing his eating habits and getting more exercise. Bryan gets a great deal of support from his mother and his friends, who remind and encourage him about good eating habits, medication and exercise. "I'm happy with how I look and I feel more confident about myself," he says of his dramatic turnaround.

Bryan is now a spokesperson for legislation in Maryland requiring elementary schools to provide more exercise time to students. Bryan is committed to helping young people prevent diabetes from affecting their lives as it has affected his and is hopeful that research will lead to a better understanding of the disease and its prevention.

# facts about: } Diabetes

## Hope for the Future:

- ⚡ Scientists are rapidly discovering genetic risk factors for diabetes. Equipped with genetic information, doctors will be better able to identify those at high risk for diabetes and discover new cures and treatments.\*
- ⚡ NIH-funded research has shown that two cancer drugs, Gleevec and Sutent, can prevent and reverse type 1 diabetes in mice. The study opened up a completely new area of research on type 1, and clinical trials in diabetes patients are expected soon.\*\*
- ⚡ Transplantation of islets—the clusters of cells that produce insulin—has been shown to reduce low blood sugar episodes and potentially eliminate the need for insulin injections for patients with type 1 diabetes.\*\*\*

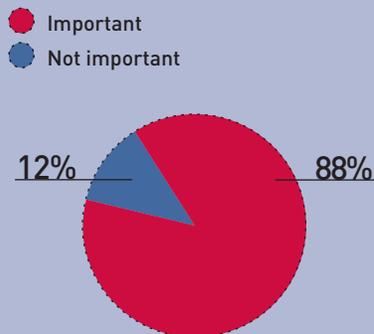
SOURCE: \* NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES (WWW.NIDDK.NIH.GOV)  
 \*\*LOUVET, C. ET AL. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES. 2008, 105(48):18895-18900.  
 \*\*\*COLLABORATIVE ISLET TRANSPLANT REGISTRY (WEB.EMMES.COM)

## The Bottom Line:

Today, 24 million Americans have diabetes and the number is only expected to grow. Investing in research will provide better treatment, prevent disease and disability, and ultimately, lead to longer, more productive lives for Americans with diabetes.

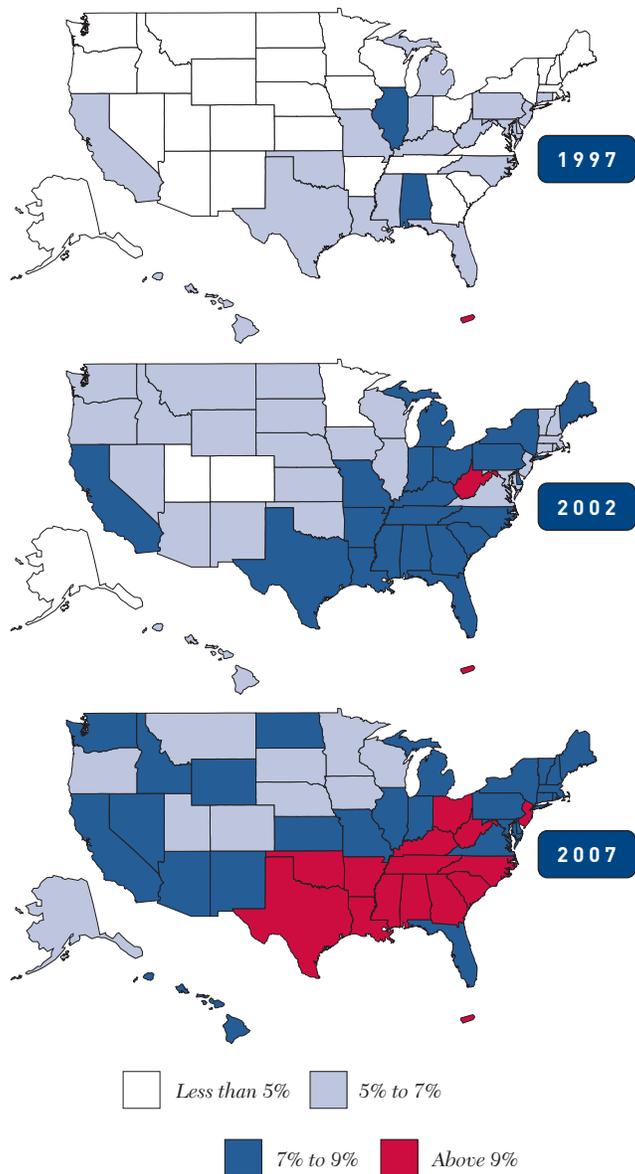
### Important to Eliminate Health Disparities

Studies show that certain health problems such as diabetes, heart disease and infant mortality happen more often among minorities or citizens with lower incomes. How important do you feel it is to conduct medical or health research to understand and eliminate these differences?



SOURCE: NATIONAL POLL, 2008  
 CHARLTON RESEARCH COMPANY FOR RESEARCH!AMERICA

### Prevalence of Diabetes by U.S. States\*



\*Includes women with a history of gestational diabetes.

SOURCE: CDC, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

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### For additional information, contact

- ⚡ The Endocrine Society at 888.363.6274; [www.endo-society.org](http://www.endo-society.org)
- ⚡ American Diabetes Association at 800.DIABETES; [www.diabetes.org](http://www.diabetes.org)
- ⚡ Juvenile Diabetes Research Foundation International at 800.533.CURE; [www.jdrf.org](http://www.jdrf.org)

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