

Diabetes: Rising Rates, Disability and Death

By Amy Winterfeld and Ashley Longshore

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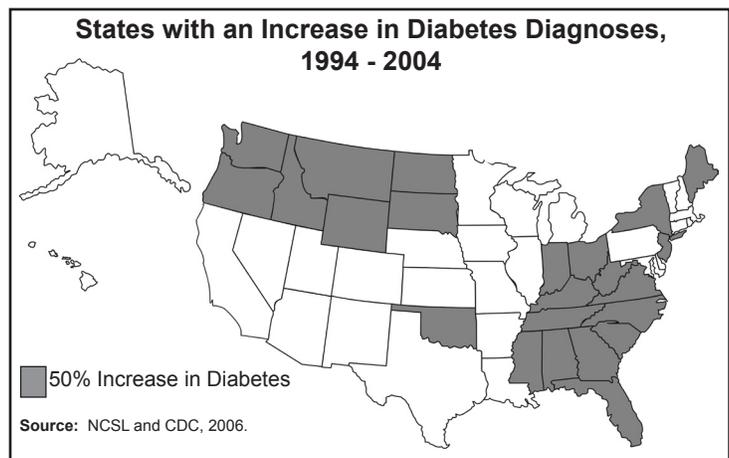
A "thrifty gene" may put some groups at risk for type 2 diabetes.

More than 20.8 million Americans—7 percent of the population—have diabetes. The number continues to grow, driven mostly by an upsurge in obesity. From 1994 to 2004, diagnosed diabetes rose at least 50 percent in 23 states. In addition, an estimated 54 million U.S. adults have pre-diabetes—an elevated blood sugar level that is not high enough to be classified as diabetes—which greatly raises their risk of developing type 2 diabetes and its complications. Of Americans with diabetes, about 6.2 million are unaware that they have the disease; thus, many fail to take steps to prevent complications.

Diabetes is the sixth leading U.S. cause of death, and complications can be serious and expensive. Without diagnosis and treatment, Americans with diabetes are at risk for heart disease, stroke, amputations, blindness and kidney disease. Each year, 12,000 to 24,000 people with diabetes become blind. In 2002, 44,400 people with diabetes developed kidney failure, and about 82,000 had leg, foot or toe amputations. Preventive care for people with diabetes greatly reduces diabetes complications. Better blood sugar control reduces the risk for eye, kidney and nerve disease by 40 percent. Detection and laser treatment for eye disease reduces the blindness risk by up to 60 percent.

Rising rates of type 2 diabetes among younger and younger Americans are a public health concern. One in three Americans born in 2000 will develop diabetes in their lifetime, which makes early diabetes prevention and control even more important. Without it, children who develop diabetes may face complications by age 35 or 40 instead of at age 60 or 65.

African American, Hispanic, American Indian and Alaska Native adults are twice as likely as white adults to have diabetes. Researchers believe some people in these groups inherited a "thrifty gene" that better enabled their ancestors to store food energy when food was plentiful, so they could survive when food was scarce. Because "feast or famine" situations now are rare in the United States, this once helpful gene may put these groups at higher risk for type 2 diabetes. Other diabetes risk factors include being over age 45, overweight, inactive or having had gestational diabetes. Even those at highest risk benefit from healthy lifestyle



changes. Cutting calories to lose 5 percent to 7 percent of body weight and increasing physical activity—walking for 30 minutes five days per week—reduced diabetes onset by 58 percent in the Diabetes Prevention Program, a major federally funded study.

State, Federal and Related National Actions

The U.S. Department of Health and Human Services announced a National Action Plan for Diabetes in 2004. In 2005, the Centers for Disease Control and Prevention funded diabetes prevention and control programs for capacity building in 22 states, eight U.S. territories, and the District of Columbia, and implementation of programs in 28 states. Some states contribute funding to these diabetes prevention and control programs; others make in-kind contributions. Despite rising rates of diabetes, however, funding for most programs has remained level in recent years. Kentucky, however, increased its annual state funding to \$2.2 million. Arizona and New York appropriated \$1 million and \$1.1 million, respectively, for diabetes prevention and control programs.

Funding for most state diabetes programs has remained level in recent years.

Insurance Coverage for Equipment and Supplies. As of 2006, 46 states and the District of Columbia require insurance coverage for diabetes services or supplies. All 46 and the District of Columbia cover diabetes supplies, but some specify which supplies are covered. Forty-five states and the District of Columbia require coverage for diabetes education, and 27 states cover medical nutrition therapy. Coverage exceptions are Alabama, Idaho, North Dakota and Ohio.

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State Legislation. In addition to insurance coverage, policy approaches to diabetes in legislatures from 2003 through 2006 include bills that address the following.

- *Child screening and diabetes management and care at school.* California and Illinois enacted legislation that requires noninvasive screening of school children for diabetes risk. Nebraska, Utah, Vermont and West Virginia passed bills encouraging schools to adopt guidelines for the care or self-care and medical management of students with diabetes and to train school personnel for this purpose.
- *Tax exemptions for diabetes equipment or supplies.* In 2004, Oklahoma created a tax exemption for diabetes monitoring equipment or supplies.
- *Diabetes funding.* Funding mechanisms for diabetes programs, research and education enacted during the past several years include revenues from special license plates, tax refund check-offs, grant programs, outright appropriations, and public-private partnerships.
- *Raising awareness.* Efforts to raise awareness include legislative declarations of specific months or weeks for diabetes recognition, asking citizens' commitment to blood glucose tests, and a "million pound meltdown" resolution. States have established diabetes commissions or studies, passed resolutions urging Congress to fund diabetes research and lift restrictions on stem cell research, and required inclusion of diabetes as a causal factor on death certificates. Oklahoma established a university-based diabetes center with \$12 million in state funding.

Selected References

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Contact for Additional Information

Amy Winterfeld
NCSL—Denver
303-364-7700, ext. 1544
amy.winterfeld@ncsl.org