

United States' Diabetes Crisis among Native Americans: Today and Future Trends

Diabetes is a very serious and rapidly growing problem for Native Americans. These people have over twice the risk of developing diabetes during their lifetimes as non-Hispanic whites.²¹ A recently released study² and the 2011 National Diabetes Fact Sheet⁶ from the Centers for Disease Control and Prevention (CDC) predict a dramatic increase in diabetes between 2010 and 2050. Using this new information from the CDC, the Institute for Alternative Futures diabetes model estimates that the number of Native Americans living with diabetes (diagnosed and undiagnosed) in America will increase 83% by 2025 from 546,400 to 1,000,000.¹ The resulting medical and societal cost of diabetes will be \$9.5 billion – a 94% increase from 2010.¹

Type 2 diabetes is becoming a common disease for many adults, and is even beginning to affect school-aged children. Native Americans were almost twice as likely as non-Hispanic whites to die from diabetes.²¹ In 2010, there were 546,400 Native Americans living in the United States who had diabetes.¹ About 203,000 of them were undiagnosed¹ and possibly beginning to suffer from common complications of diabetes, including eye, kidney, lower extremity, and heart damage.³ The overall cost of diabetes among Native Americans in the United States, including medical expenses and lost productivity, was about \$4.9 billion in 2010.¹

Another 1,027,000 Native Americans had pre-diabetes,¹ a condition in which the blood sugar level is higher than normal but not yet in the range for diabetes.⁴ Many scientific studies have shown that relatively simple life-style changes, such as modest weight loss and increases in regular physical activity, can often prevent pre-diabetes from progressing to diabetes or significantly delay its onset by as much as 58%.¹⁴ However, if they do not take action, individuals with pre-diabetes can often progress to diabetes within 10 years.⁴ So if current trends continue, the number of Native Americans with diabetes is projected to increase to 1,000,000 by 2025.¹

Pre-Diabetes and Diabetes Trends¹ among Native Americans in the United States

U.S. Native American Diabetes Data and Forecasts	2010	2025
Population	4,033,000	5,183,000
Pre-diabetes	1,027,000	1,320,000
Diagnosed diabetes	343,400	728,800
Undiagnosed diabetes	203,000	271,200
Total with diabetes (diagnosed and undiagnosed)	546,400	1,000,000
Complications:		
Visual impairment	61,500	123,900
Renal failure	1,390	2,460
Leg amputations	1,690	2,590
Annual deaths attributable to diabetes	6,690	10,850
Total annual cost (2010 dollars)	\$4.9 B	\$9.5 B
Annual medical costs	\$3.4 B	\$6.6 B
Annual nonmedical costs	\$1.5 B	\$2.9 B

We now understand more about delaying or even preventing the onset of diabetes as well as how to effectively treat it, both of which can result in a dramatic reduction in complications and premature death.^{12,13,14} Reducing the future burden of diabetes in the United States depends upon the promotion of targeted screening for asymptomatic adults to identify those with pre-diabetes and undiagnosed diabetes, improved access to quality medical care, and increased patient compliance with therapy.^{14,15,16} However, halting the “twin epidemics” of diabetes and obesity will also require fundamental change in all segments of society, including greater access to opportunities for physical activity in our schools, workplaces, and communities and a significant shift in the American diet away from sugar, salt, refined carbohydrates, and saturated fats and toward more fruits and vegetables.¹⁵ In short, we all play an important role in conquering diabetes.

These forecasts are based on available national diabetes data, including population projections extrapolated to the state, and the CDC’s 2011 National Diabetes Fact Sheet and latest diabetes prevalence projections to 2050. They assume a steady, but conservative, reduction in the number of people with complications due to better awareness of the risks of diabetes, earlier screening and intervention, and more effective therapies.

For endnote references and details on the Institute for Alternative Futures Diabetes 2025 Forecasting Model Methodology, visit www.altfutures.org/diabetes2025.

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