

Endnote References

IAF Diabetes 2025 Forecasts Briefing Papers

Ref #	Reference	Notes
1	Institute for Alternative Futures Diabetes 2025 Forecasting Model, 2010 http://www.altfutures.org/diabetes2025	Institute for Alternative Futures, Diabetes 2025 Forecasting Model was used to determine all diabetes projections for 2000, 2015, and 2025. A separate methodology explanation will be available at http://www.altfutures.org/diabetes2025
2	Boyle JP, et al. Projection of the Year 2050 Burden of Diabetes in the US Adult Population: Dynamic Modeling of Incidence, Mortality and Pre-Diabetes Prevalence. <i>Population Health Metrics</i> 2010, 8:29. http://www.pophealthmetrics.com/content/8/1/29 (accessed 1/15/2011).	Projected another dramatic increase in both diagnosed and undiagnosed diabetes with forecasts for 2010 to 2050. (page 1 of 12)
3	Harris MI, Eastman RC. Early detection of undiagnosed diabetes mellitus: a US perspective. <i>Diabetes Metab Res Rev</i> 2000; 16:230-236. http://onlinelibrary.wiley.com/doi/10.1002/1520-7560(2000)9999:9999%3C::AID-DMRR122%3E3.0.CO;2-W/full (accessed 1/16/2011).	People with undiagnosed diabetes may already be developing organ damage leading to the common complications of diabetes – blindness, renal failure, amputations, and heart disease. (pages 230, 231-232)
4	National Centers for Disease Control and Prevention, Prevent Diabetes. http://www.cdc.gov/diabetes/consumer/prevent.htm (accessed 1/21/2011).	“People with blood glucose levels that are higher than normal but not yet in the diabetic range have ‘prediabetes.’ ” “...most people with prediabetes go on to develop type 2 diabetes within 10 years, unless they lose weight through modest changes in diet and physical activity.” “People with prediabetes also have a higher risk of heart disease.” Diabetes is frequently associated with obesity, high blood pressure, and high cholesterol. (page 2 of 4)
5	American Diabetes Association. Type 2 Diabetes Mellitus as a Risk Factor for the Onset of Depression: A Systematic Review and Meta-Analysis. http://www.diabetes.org/news-research/news/diabetes-in-the-news/type-2-diabetes-mellitus-as-a.html (accessed 1/15/2011).	“...patients with type 2 diabetes have a 24 percent higher risk of developing depression.” (page 1 of 2)

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Centers for Disease Control and Prevention. National Diabetes Fact Sheet, 2011
http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf (accessed 1/26/2011).

This fact sheet provides a comprehensive list of diabetes statistics for prevalence, complications, mortality, and costs.

“Among U.S. residents aged 65 years and older, 10.9 million, or 26.9% had diabetes in 2010.” (page 1)

25.8 million people have diabetes in 2010; 18.8 million are diagnosed and 7.0 million are undiagnosed [27% of total are undiagnosed] (page 1)

“...diabetes can affect many parts of the body and can lead to serious complications such as blindness, kidney damage, and lower-limb amputations.” (page 9)

About 68% of deaths among seniors with diabetes were due to heart disease and 16% were due to a stroke related to their disease in 2004. (page 8)

“Compared to non-Hispanic white adults, the risk of diagnosed diabetes was 18% higher among Asian Americans, 66% higher among Hispanics, and 77% higher among non-Hispanic blacks. Among Hispanics compared to non-Hispanic whites adults, the risk of diagnosed diabetes was about the same for Cubans and for Central and South Americans, 87% higher for Mexican Americans, and 94% higher for Puerto Ricans.” (page 3)

“In 2005-2008, based on fasting glucose or A1c levels, 35% of U.S. adults aged 20 years or older had pre-diabetes (50% for those aged 65 years or older)... [and in 2010 there were] an estimated 79 million Americans aged 20 years or older “ who had pre-diabetes. This is similar for non-Hispanic whites (35%), non-Hispanic blacks (35%), and Mexican Americans (36%). (page 5)

Comprehensive management of diabetes and its co-morbidities can reduce amputation rates 45-85% and can reduce the decline in renal function preventing renal failure by 30-70%. (page 10)

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Narayan, et al. Lifetime Risk for Diabetes Mellitus in the United States. *JAMA* 2003; 290:1884-1890.
<http://jama.ama-assn.org/content/290/14/1884.full.pdf+html> (accessed 1/16/2011).

Lifetime risk for diagnosed diabetes varies significantly based on age, sex and ethnic group. (see tables on page 1886)

People with diabetes can lose from 4 to 23 life-years depending upon their age, sex and ethnicity. (see pages 1887-1888 for specifics)

People with diabetes can lose from 5 to 37

		quality-adjusted life-years (a measure of suffering and disability), depending upon their age, sex and ethnicity. (see pages 1887-1888 for specifics)
8	Mayo Clinic. Risk Factors. http://www.mayoclinic.com/health/type-2-diabetes/DS00585/DSECTION=risk-factors (accessed 1/10/11).	"The risk of type 2 diabetes increases as you get older, especially after age 45." (page 1 of 2)
9	Gossain VV, Aldasouqi S. The challenge of undiagnosed pre-diabetes, diabetes and associated cardiovascular disease. <i>International Journal of Diabetes Mellitus</i> 2010; 2:43-46. http://download.journals.elsevierhealth.com/pdfs/journals/1877-5934/PIIS1877593409000563.pdf (accessed 1/16/2011).	"A substantial number of people with diabetes and pre-diabetes remain undiagnosed worldwide." (page 43)
10	American Diabetes Association. Standards of Medical Care in Diabetes—2010. <i>Diabetes Care</i> 2010; 33:S11-S61. http://care.diabetesjournals.org/content/33/Supplement_1/S11.extract (accessed 1/15/11).	Comprehensive guide to evidence-based management of diabetes.
11	Medicare Diabetes Screening Project. Why Screen. http://www.screenfordiabetes.org/wp-content/uploads/2010/11/DiabetesSvcs2009.pdf (accessed 1/15/2011). and http://www.screenfordiabetes.org/benefits-of-diabetes-screening/what-does-medicare-offer/ (accessed 1/15/2011).	Information on screening for pre-diabetes and undiagnosed diabetes in seniors and explains the free screening program offered by Medicare for seniors at risk. ("Why Screen" and "What does Medicare Offer?")
12	Ullom-Minnich P. Strategies to reduce complications of type 2 diabetes. <i>The Journal of Family Practice</i> 2004; 53(5):366-374. http://www.jfponline.com/Pages.asp?AID=1694 (accessed 1/16/2011).	Guide for effective management in ways to reduce complications and mortality of diabetes. (Entire article full of treatment recommendations with data)
13	Roussel R, et al. Metformin Use and Mortality Among Patients With Diabetes and Atherothrombosis. <i>Arch Intern Med</i> 2010; 170(21):1892-1899. http://archinte.ama-assn.org/cgi/content/abstract/170/21/1892 (accessed 1/16/2011).	"These data from the observational REACH Registry indicate that the use of metformin as a means of secondary prevention was associated with a significant 24.0% reduction in all-cause mortality after 2 year follow-up." (page 1897)
14	Diabetes Prevention Program Research Group. Reduction in the Incidence of Type 2 Diabetes with Lifestyle Intervention or Metformin. <i>N Engl J of Med</i> 2002; 346:393-403. http://www.nejm.org/doi/full/10.1056/NEJMoa012512 (accessed 1/15/2011).	The incidence of pre-diabetes going on to diabetes was reduced by 58% (71% for those 60 and older) with lifestyle intervention during an average follow-up of 2.8 years. (page 393, Table 2 on page 398)
15	World Health Organization. Diabetes. http://www.who.int/mediacentre/factsheets/fs312/en/index.html (Accessed 1/10/2011).	Lifestyle measures shown to be effective in preventing or delaying the onset of type 2 diabetes. (page 3 of 4)
16	Jones AP, et al. Understanding Diabetes Population Dynamics Through Simulation Modeling and Experimentation. <i>Am J Public Health</i> . 2006; 96:488-494.	This CDC paper models the impact of the management of pre-diabetes, enhanced clinical management of diabetes, and

behavior change to reduce the prevalence of obesity. Whereas all interventions made a difference, reducing obesity prevalence resulted in the most significant long-term improvement in diabetes prevalence and deaths. (pages 492-493)

17 National Diabetes Education Program, The Facts about Diabetes: America's Seventh Leading Cause of Death.

http://www.ndep.nih.gov/media/FS_GenSnapshot.pdf (accessed 1/15/2011).

"Non-Hispanic blacks are about 1.8 times more likely to have diabetes as non-Hispanic whites twenty years and older." (page 2 of 2)

18 US Department of Health and Human Services Office of Minority Health, Diabetes and African Americans.

<http://minorityhealth.hhs.gov/templates/content.aspx?lvi=3&lvid=5&ID=3017> (accessed 1/15/2011).

African Americans have:

- 2.2 times more end-stage renal disease than whites
- 2.3 times more lower extremity amputations than whites
- 2.3 times higher age-adjusted death rate than whites

(page 1 of 4)

19 US Department of Health and Human Services Office of Minority Health, Diabetes and Hispanic Americans.

<http://minorityhealth.hhs.gov/templates/content.aspx?lvi=3&lvid=5&ID=3324> (Accessed 1/15/2011).

"Mexican American adults are 1.9 times more likely than non-Hispanic white adults to have been diagnosed with diabetes by a physician. In 2006, Hispanics were 1.7 times as likely to start treatment for end-stage renal disease related to diabetes compared to non-Hispanic men. In 2006, Hispanics were 1.5 times as likely as non-Hispanic Whites to die from diabetes." (page 1 of 4)

20 Prevalence of Diabetes among Hispanics—Selected Areas, 1998-2002.

MMWR Weekly, 10/15/04/53(40);941-44
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5340a3.htm> (accessed 1/15/2011).

Shows significant difference in the prevalence of Hispanics with diagnosed diabetes between six geographic areas – California, Florida, Illinois, New York/New Jersey, Texas, and Puerto Rico. (Table 1, page 4 of 6)

21 Department of Health and Human Services Office of Minority Health, Diabetes and American Indians/Alaska Natives.

<http://minorityhealth.hhs.gov/templates/content.aspx?lvi=3&lvid=5&ID=3024> (Accessed 1/15/2011).

"American Indians/Alaska Natives are twice as likely to be told by a physician that they have diabetes as their non-Hispanic white counterparts ... also almost twice as likely to die from diabetes..." (page 1 of 3)

22 Department of Health and Human Services Office of Minority Health, Native Hawaiians/Other Pacific Islanders Profile.

<http://minorityhealth.hhs.gov/templates/browse.aspx?lvi=2&lvid=71> (Accessed 1/16/2011).

"In Hawaii, Native Hawaiians have more than twice the rate of diabetes as Whites ... [and] are more than 5.7 times as likely as Whites living in Hawaii to die from diabetes." (page 2 of 3)

23 US Department of Health and Human Services Office of Minority Health, Diabetes and Asians and Pacific Islanders.

<http://minorityhealth.hhs.gov/templates/content.aspx?lvi=3&lvid=5&ID=305>

"Asians are 20% less likely than non-Hispanic whites to die from diabetes." (page 1 of 4)

[7](#) (Accessed 1/15/2011).

Age-adjusted percentage of adults with diagnosed diabetes in 2001-2002 of Asian groups compared to general US population:

- Asians/Pacific Islanders 1.1 times (higher)
- Cambodians in MA 0.7 times (lower)
- Vietnamese in CA 0.8 times (lower)

(page 1 of 4)

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U.S. Census Bureau, Population Division, Interim State Population Projections, 2005, Internet Release Date, April 21, 2005.
<http://www.census.gov/population/www/projections/files/SummaryTabB2.pdf>
(accessed 11/9/2011).

Population for seniors 65 years and older by state for 2000 to 2030 in 5 year increments.

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U.S. Census Bureau, Population Division. Metropolitan Statistical Areas and Components, December 2009.
<http://www.census.gov/population/www/metroareas/lists/2009/List4.txt>
(Accessed 11/1/2010).

Definitions of metropolitan statistical areas.

26

Bizjournals: Projected population of 250 U.S. metros.
<http://www.bizjournals.com/specials/pages/257.html>. (accessed 7/30/2010 - no longer free on web site).

Population projections to 2025 for 250 metropolitan statistical areas.

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Share of the Population That is Age 65 or Over,
<http://diversitydata.sph.harvard.edu/Data/Rankings/Show.aspx?ind=191>
(accessed 1/19/2011).

Percent of metropolitan area population that is 65 years and older for 2000 and 2009 (latest data available).