



State of Illinois
Illinois Department of Public Health

ANNUAL PROGRESS REPORT

Illinois State Diabetes Commission
Illinois Diabetes Prevention and Control Program

As required by PA 094-0788

ILLINOIS STATE DIABETES COMMISSION MEMBERSHIP

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ILLINOIS STATE DIABETES COMMISSION

The Illinois State Diabetes Commission (the commission) was created in 2006 in accordance with Public Act 094-0788 to:

- Gather information from the general public on issues pertaining to the prevention, treatment, and control of diabetes
- Develop a strategy for the prevention, treatment, and control of diabetes
- Examine the needs of adults, children, racial and ethnic minorities, and medically underserved populations who have diabetes

The Illinois Department of Public Health (IDPH) has managed oversight and support of the 15-member commission since July 2010 when the duties and responsibilities for the state's diabetes prevention and control program were transferred from the Illinois Department of Human Services by Executive Order 10-06 and legislation. Over the past five years, the priorities of the commission have been to restructure objectives and goals and to develop a five-year Illinois State Diabetes Plan to help reduce the burden of diabetes among Illinois residents.

The commission consists of physicians, who are board certified in endocrinology, have expertise and experience in the treatments of both childhood diabetes and adult onset diabetes; health care professionals with expertise and experience in the prevention, treatment, and control of diabetes; representatives of organizations or groups that advocate on behalf of persons suffering from diabetes; legislators; and members of the public who have been diagnosed with diabetes.

The commission met two times in fiscal year 2016.

ILLINOIS DIABETES PREVENTION AND CONTROL PROGRAM

In July 2013, IDPH entered into a new grant agreement with the U.S. Centers for Disease Control and Prevention (CDC) for the *State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health – FOA – DP13-1305* approach to preventing and reducing the risk factors associated with childhood and adult obesity, diabetes, heart disease, and stroke; and addressing the management of chronic diseases. IDPH's program entitled "Chronic Disease and School Health" (CDASH) addresses the CDC four chronic disease and health promotion domains: 1) epidemiology and surveillance; 2) environmental approaches that promote health and support and reinforce healthful behaviors; 3) health system interventions to improve the effective delivery and use of clinical and other preventive services; and 4) community-clinical linkages to support cardiovascular disease and diabetes prevention and control efforts and the management of chronic diseases.

The two grant strategies that are specific to diabetes include 1) promoting awareness of prediabetes among people at high risk for type 2 diabetes; and 2) promoting participation in American Diabetes Association-recognized, American Association of Diabetes Educators-accredited, state-accredited/certified, and/or Stanford University-licensed Diabetes Self-Management Education programs.

DIABETES BURDEN IN ILLINOIS

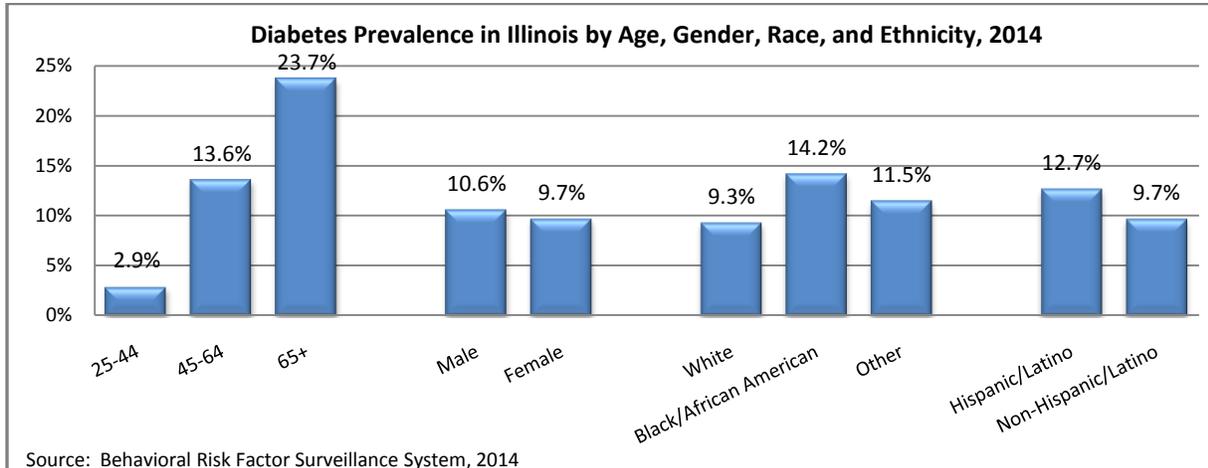
According to CDC, 29.1 million people, 9.3 percent of the population in the United States has diabetes. This includes 21.9 million with diagnosed and 8.1 million undiagnosed with diabetes – one in four people do not know they have it¹. Every year there are 1.7 million new cases of diabetes diagnosed.¹ In Illinois, the number of adults diagnosed with diabetes has more than doubled in the past 15 years, reaching approximately 1,002,134 in 2014, 10 percent of the adult population². It is the seventh leading cause of death in Illinois³.

People with prediabetes have glucose levels higher than normal, but not high enough to be diagnosed with diabetes. People with prediabetes are at higher risk of developing type 2 diabetes, heart disease, and stroke. CDC estimates that 86 million adults in the United States – more than one out of three – have prediabetes, and nine out of ten do not know they have it. Approximately 3.7 million adults in Illinois have prediabetes. Only about 260,000, seven percent, of those have been diagnosed. CDC and the Institute for Alternative Futures (IAF) have estimated that nationally diabetes will rise by 64 percent from 2010 to 2025.³

Risks for diabetes include being overweight or obese, immediate family with history of diabetes, physical inactivity, age, race, ethnicity, gestational diabetes, impaired fasting glucose and/or elevated hemoglobin A1c, high blood pressure, abnormal cholesterol results, especially in regards to elevated triglycerides and low high density lipoprotein (HDL) cholesterol, and polycystic ovary disease.

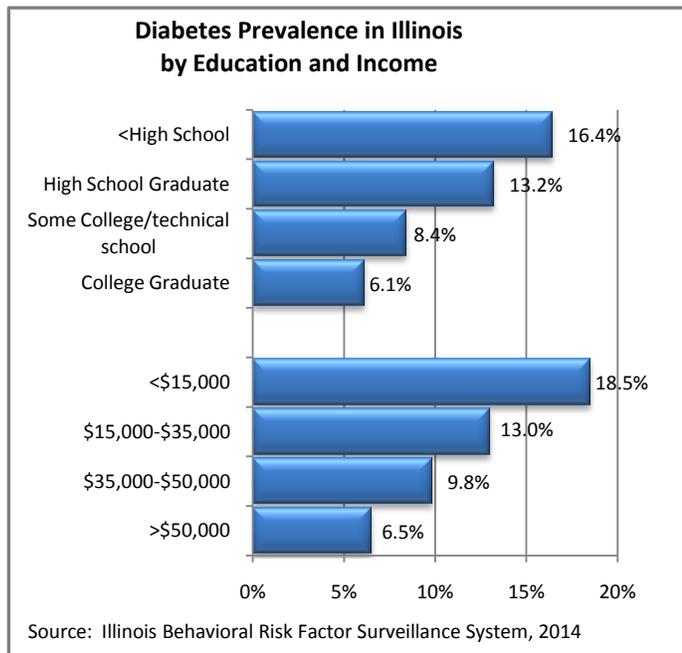
Diabetes Demographics

Diabetes prevalence differs among demographic populations and increases with age. Data from the Illinois BRFSS show the percentage of adults who were told they have diabetes increased significantly for each age group. Adults 65 years of age and older had the highest rate at 23.7%. Racial and ethnic minorities have a higher prevalence of (type 2) diabetes. The rate was higher for African Americans (14.2%) than it was for white (9.3%) and other races (11.5%) and for Hispanic/Latino (12.7%) when compared to non-Hispanic/Latino (9.7%).



Socioeconomic Status

The prevalence of diabetes has been associated with level of income and education. As education and income levels increase, the prevalence of diabetes decreases, indicating that people with the lowest socioeconomic status have the highest prevalence of diabetes. According to the 2014 Illinois BRFSS, the prevalence of diabetes is highest among adults with a household income of less than \$15,000 (18.5%) and lowest in the above \$50,000 income bracket (6.5%). It is significantly lower in adults with college degrees (6.1%).



Children with Diabetes

In 2012, approximately 214,000 people in the U.S. younger than 20 years of age had diabetes.¹ SEARCH for Diabetes in Youth was a multicenter study funded by CDC and the National Institutes of Health to examine diabetes (type 1 and type 2) among children and adolescents in the U.S. The study showed in 2009, an estimated 18,436 people under 20 years of age were newly diagnosed with type 1 diabetes and 5,089 were diagnosed with type 2 diabetes. Non-Hispanic white children had the highest rate of type 1 diabetes while the rate of type 2 diabetes was highest among minority youth - American Indian/Alaskan Native, black, and Hispanic. Data from the SEARCH study show the prevalence of both type 1 and type 2 diabetes has increased.¹

From 2001-2009, the prevalence of type 1 diabetes rose 23 percent and type 2 diabetes rose 21 percent. Worldwide, the prevalence of youth diagnosed with type 1 diabetes has grown at an average rate of 3 percent. Preliminary data from the SEARCH study indicates this is also the national rate of increase.

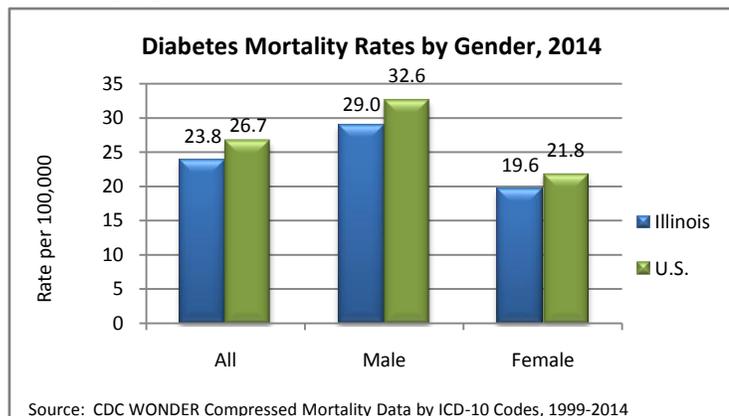
Additional preliminary findings from SEARCH:

- Many children and adolescents in the U.S. with diabetes already show measurable signs of complications from diabetes, such as peripheral neuropathy and increased risk of lower limb amputations.
- Youth with type 2 diabetes are at higher risk of developing kidney disease than with type 1 diabetes.
- Youth with diabetes who watch more than three hours of television per day have higher A1C and triglyceride levels than those who do not.

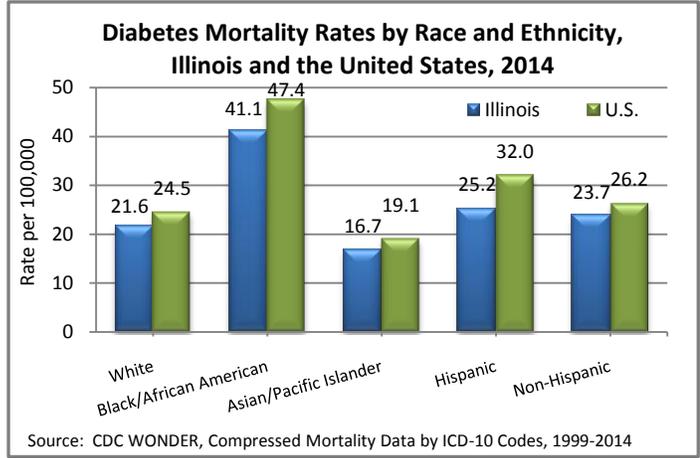
Diabetes Mortality

In 2014, diabetes was the seventh leading cause of death in both Illinois and the U.S.¹⁻² A total of 2,712 people in Illinois died from diabetes in 2014, an average of seven people per day. Diabetes may be underreported as a cause of death. Studies have found that only about 35% to 40% of people with diabetes who died had diabetes listed anywhere on the death certificate and about 10% to 15% had it listed as the underlying cause of death.¹

According to CDC WONDER, Compressed Mortality data, in 2014, the age-adjusted diabetes mortality rate in Illinois (15 years of age and older) was 23.8 per 100,000 compared to the national rate of 26.7 per 100,000. The diabetes mortality rate was higher for males than for females in both Illinois and the U.S.



In Illinois and the U.S., the diabetes mortality rate for Black/African Americans was significantly higher than for whites. Both whites and Blacks/African Americans had a higher rate of diabetes mortality than Asian or Pacific Islanders.⁶



The rate of diabetes varies by county throughout Illinois. According to BRFSS, Effingham County had the lowest rate of diabetes with 4.6 percent of the population and Edgar County had the highest rate with 17.4 percent of the population. The map on the next page shows how the percentage of adults with diabetes differs in areas throughout the state.

Diabetes Cost

Chronic diseases are costly. They require funding, resources, and planning to combat and prevent. Hospitalizations due to diabetes are particularly expensive for the Illinois health care system. In 2014, there were 21,108 hospitalizations caused by diabetes.⁴ The average length of stay for a diabetes hospitalization is 4.5 days and the median cost is \$21,422. The financial toll of diabetes on the Medicaid system results in an average cost of \$3,135 per person covered for a total of \$636 million dollars in pharmacy and non-pharmacy payments.⁴

CDC Chronic Disease Prevention and Health Promotion and RTI International (Research Organization) provide a Chronic Disease Cost Calculator, a tool for states that estimates the financial burden of chronic disease. Version 2 of this Chronic Disease Cost Calculator calculates state-level annual medical expenditures and absenteeism for chronic conditions. Absenteeism includes costs and number of work days missed. It calculates annual medical costs from 2010 and projected medical costs until 2020. Expenditures are given for the total state population, all payers combined, and breakout amounts for Medicaid, Medicare, and private insurers.

According to the Chronic Disease Costs Calculator Version 2, in 2010 the average cost of treating a person with diabetes was \$6,490, or \$5 billion for all persons with diabetes. The average employed person with diabetes in Illinois missed two days of work due to diabetes, totaling 753,000 days of work and \$183 million in lost productivity and wages annually. The Chronic Disease Cost Calculator estimates a 60.3 percent increase in medical costs, excluding absenteeism, from 2010 to 2020. The projections do not project inflation, assume no changes in policy or technology, and exclude changes due to the Affordable Care Act.⁷

FUTURE PLANS

The Illinois State Diabetes Commission was an essential partner in developing the Illinois State Diabetes Plan in 2014. IDPH's Division of Chronic Disease Prevention and Control (DCDPC) collaborated with the commission to schedule and hold public hearings to gather information on issues pertaining to the prevention, treatment, and control of diabetes, to ensure maximum reach, and to promote education related to the nature and extent, underlying causes, and prevention and control of diabetes.

The Illinois Diabetes State Plan addresses a comprehensive set of policy and program recommendations that will have an impact on improving the quality of life for Illinois residents, particularly the most at-risk for and vulnerable to diabetes. The plan is intended to provide state and local agencies, health care providers, organizations, funding agencies, policy and decision makers, and consumers, direction and support for creating a system of prevention that proactively promotes a comprehensive and integrated approach to reducing the morbidity and mortality of diabetes. The plan is a call to action, urging everyone to take a role in reducing the burden of diabetes in Illinois. Achieving the goals will take:

- Action by many partners applying different and creative solutions to change environments, systems, communities, and individual behaviors
- Involvement by public and private partners in communities to assure that priority areas in diabetes are addressed
- Statewide groups working to achieve policy changes at the state and national level that support strategies and actions plans noted in the plan
- Individual residents of Illinois taking action to change their own environments and lifestyle behaviors as a result of efforts made to support the plan
- Review of the goals, strategies and action plan and identification of specific items for further action
- Partnering with the Illinois State Diabetes Commission or working with the IDPH's Diabetes Prevention and Control Program and the CDASH Program in preventing and controlling diabetes
- Partnering with other organizations and local health departments to share goals and strategies for preventing and controlling diabetes

In conclusion, the Illinois State Diabetes Commission and the DCDPC will continue to research and to promote partnerships with community entities and to seek emerging opportunities to address Prediabetes, market continuing education for health professionals, develop new community programs that enhance ongoing prevention efforts, and look for federal grant programs to help change the course of diabetes management.

The finalized goals, strategies and action steps will be evaluated based on identified criteria to assess level of accomplishment and impact. The Epidemiology and Surveillance Team will conduct data analysis and report findings to the DCPC, Illinois State Diabetes Commission and partners.

Sources

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