



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

June 10, 2014

Gov. Pat Quinn and Members of the General Assembly:

I am pleased to present the 2013-2014 Annual Progress Report of the Illinois State Diabetes Commission, which details efforts of the state and the commission to identify and to improve services for persons with diabetes and their families.

Diabetes is the eighth leading cause of death in Illinois and, according to the 2011 Illinois Behavioral Risk Factor Surveillance System (BRFSS), approximately 921,093 adults (18 years of age or older) in the state have diabetes. The estimated medical cost of diabetes in Illinois is \$8.98 billion, which includes \$6.6 billion in direct medical costs and \$2.4 billion in indirect costs, such as disability, work loss and premature mortality. Due to the medical costs associated with diabetes, 17.6 percent of persons living with diabetes in Illinois reported avoiding medical care over the course of the year in 2011.

The Illinois Department of Public Health, along with the commission and partners throughout the state are collaborating to ensure all people with diabetes, especially those at greater risk for health disparities, achieve their optimal lifespan with the best possible quality of health. Those involved are working to encourage lifestyle changes that include moderate weight loss and exercise to prevent the onset of diabetes among those at high risk. The Department also has strived to gather timely data essential for developing a better understanding of how diabetes affects different population groups and how quality of care can be improved.

We look forward to a continuing partnership with you, the Illinois Legislative Diabetes Caucus, as well as other programs and divisions throughout the state, that encourage management and prevention of diabetes with the goal to reduce its burden and complications throughout Illinois.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Hasbrouck', is written over a large, stylized circular flourish.

LaMar Hasbrouck, M.D., M.P.H.
Director, Illinois Department of Public Health
Chair, Illinois State Diabetes Commission

ILLINOIS STATE DIABETES COMMISSION MEMBERSHIP

LaMar Hasbrouck, M.D., M.P.H., Illinois Department of Public Health, Chair

Thomas L. Pitts, M.D., Northwestern University Feinberg School of Medicine, Co-chair

Kimbra Bell, M.D., Northwestern University Feinberg School of Medicine

State Rep. Tom Cross, 84th District

Jay Gandhi, PharmD, C.D.M., Fidelis Senior Care Inc.

Fil Guipoco, M.A., American Heart Association

Neil Horsley, M.D., Rosalind Franklin University of Medicine and Science

Patricia Horton, Representing the Public with Diabetes

State Sen. Mattie Hunter, 3rd District

Rosemary F. Jaffe, American Diabetes Association, Representing the Public with Diabetes

Mary Kreiter, M.D., Pediatric Endocrinologist

Rev. David O. Kylo, Rehabilitation Institute of Chicago

Luis Munoz, M.D., Illinois Hispanic Physicians Association

Marla C. Solomon, R.D., LD/N., C.D.E., University of Chicago

Fred Wendler, Physical Therapist, Representing the Public with Diabetes

ILLINOIS STATE DIABETES COMMISSION

In accordance with Public Act 094-0788, the Illinois State Diabetes Commission was created in 2006 to:

- Hold public hearings 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 Department 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 four years, the priorities of the commission have been to restructure objectives and goals 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 treatment of childhood diabetes and the treatment of 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 four times in fiscal year 2014. However, official business was only able to be conducted at three of the meetings since the commission did not reach a quorum of its members at the November 21, 2013 meeting. The issue of meeting attendance was discussed in previous meetings and the commission members present urged the Department to end the memberships of those individuals who were no longer attending the meetings. After surveying members regarding their continued service, the Department has closed out memberships of inactive members. The Illinois State Diabetes Commission Bylaws were changed to allow commission voting members to appoint a delegate to attend on their behalf when they are unable to participate in a meeting.

During the last year, the commission made progress with outreach and public awareness to prevent and to reduce diabetes, address the Burden of Diabetes in Illinois and develop a draft five-year Illinois State Diabetes Plan.

ILLINOIS DIABETES PREVENTION AND CONTROL PROGRAM

In July 2013, the Department entered into a new grant agreement with 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 to reducing the risk factors associated with childhood and adult obesity, diabetes, heart disease and stroke; and addressing the management of chronic diseases. The Department'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.

In strengthening community-clinical linkages for the management of diabetes, the Department is referring partners to CDC evidence-based, on-line resources and guidelines and developing a single point of access for these resources through the Department's website. The health communication will raise awareness among people at high risk of the following:

- Prediabetes risk factors
- The location of sites offering the CDC-recognized National Diabetes Prevention (DPP) lifestyle change program
- How to enroll in the program

The online resource will be used in training and technical assistance statewide for health care systems, local health departments, health educators, parish nurses and others. The online resource will include guidelines for discussing impaired glucose tolerance and hemoglobin A1c measurements, risk factors and lifestyle modifications to reduce the risk of diabetes and to promote the use of materials from the National Diabetes Education Program and the American Diabetes Association for *American Diabetes Association Alert Day, American Diabetes Month* and *World Diabetes Day*.

To improve access to Diabetes Self-Management Education (DSME), the Department is exploring ways in which to work with health insurance carriers (Medicaid and private health insurance plans sold through the Illinois Insurance Marketplace) to include DSME as part of the standards of care for patients with diabetes and monitor the quality of care through reports from Illinois' Health Information Exchange. The second part of the Department's strategy to improve access to DSME is to work with hospitals to encourage development of outpatient programs that meet American Association of Diabetes Educators standards and will therefore be eligible for reimbursement through the Medicare program.

Illinois Tobacco Quitline

The Illinois Tobacco Quitline (ITQL), which is operated by the American Lung Association through a Department grant, regularly refers people with diabetes who call the ITQL to quitline services and to community smoking cessation programs. This activity was expanded in fiscal years 2012 and 2013 and tracked for the number of people with diabetes who smoke and who were referred to the quitline, who called the quitline, who initiated a smoking cessation program, and who quit and remained tobacco free for at least seven months. National Diabetes Education Program materials are provided to diabetic smokers. Local health departments share information about community-based resource information, such as smoking cessation programs, chronic disease self-management and diabetes self-management education programs with the ITQL. In fiscal year 2012, persons with diabetes accounted for 990 callers to the ITQL. During fiscal year 2013, persons with diabetes totaled 1,309 calls to the ITQL. The increase is due to the efforts of the local health department diabetes prevention & control programs. The programs referred persons with diabetes to the ITQL from their DSMP/CDSMP classes, health events, community events, outreach programs and patient clinics. The programs also heavily marketed the ITQL via their websites and social media websites.

Public Awareness and Education

The CDASH program and the Illinois State Diabetes Commission were active in promotion of diabetes education through distribution of National Diabetes Education Program (NDEP) material during American Diabetes Month (November) to partnering agencies. On July 17, Public Act 097-0819 became effective and designated November 14 each year as Diabetes Awareness Day to be observed as a day for the people of Illinois to support efforts to decrease the prevalence of diabetes, develop better treatments, and work toward an eventual cure for Type 1 and Type 2 diabetes through increased research, treatment and prevention.

Also, many commission members and Department staff attended Diabetes Alert Day (March 25) activities throughout the state and Diabetes Advocacy Day (April 30). In partnership with

the Illinois Diabetes Policy Coalition, the Illinois Legislative Diabetes Caucus hosted a Diabetes Advocacy Day on April 30 at the Illinois State Capitol. Illinois' policy makers were educated on issues that directly affect persons living with diabetes and its complications.

A *Burden of Diabetes in Illinois* update was published this year. The report contains updates on state data regarding the prevalence of diabetes, prediabetes, weight status, tobacco use, economic cost, and health care access among adults with and without diabetes. The commission members utilized the burden update towards selecting goals and strategies to include in the draft Diabetes State Plan.

Diabetes Coalitions

Local diabetes coalitions are collaborative efforts by former Diabetes Prevention and Control Programs who share the goal of stimulating improvements in early detection, prevention and control of diabetes. This goal is met by increasing public awareness about healthy lifestyles, increasing the focus on prevention among health care providers, and supporting legislative action to increase funding for and access to prevention programs.

Diabetes Prevention and Control Programs throughout Illinois received training on how to develop, to maintain and to manage diabetes coalitions, and to advocate for people who have diabetes or are at risk of the disease. In 2011-2013 the grantees developed a coalition, completed a needs assessment and determined a priority focus area for their diabetes efforts in relation to Diabetes Alert Day and American Diabetes Month. The local diabetes coalitions have continued meeting and are a driving force for diabetes prevention and control in Illinois communities.

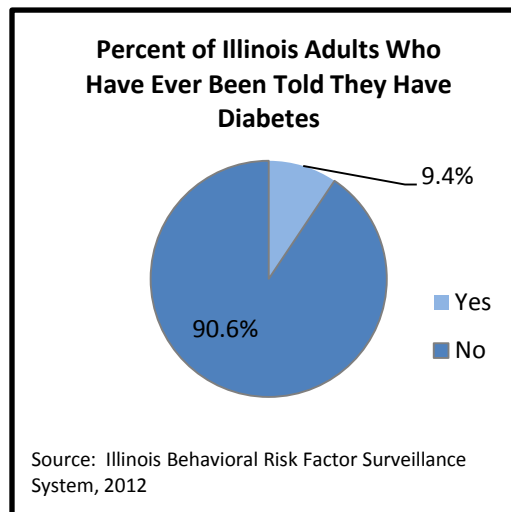
DIABETES BURDEN IN ILLINOIS

In 2010, according to the CDC, 26 million people in the nation (8.3% of the population) had diabetes, including 7 million who had diabetes, but remained undiagnosed. From 2005 through 2008, based on fasting glucose or hemoglobin A1c levels, 35 percent of U.S. adults at least 20 years of age had prediabetes, 50 percent of whom were 65 years of age or older. When applied to the 2010 population, this amounts to 79 million Americans.¹

CDC and the Institute for Alternative Futures (IAF) have estimated that nationally diabetes will rise by 64 percent from 2010 to 2025.²

In 2011, according to the Illinois Behavioral Risk Factor Surveillance System (BRFSS), 9.7 percent and, in 2012, 9.4 percent of adults in Illinois had been told they have diabetes. Approximately 800,000 adults had been diagnosed with diabetes and 500,000 adults were not aware they have it.

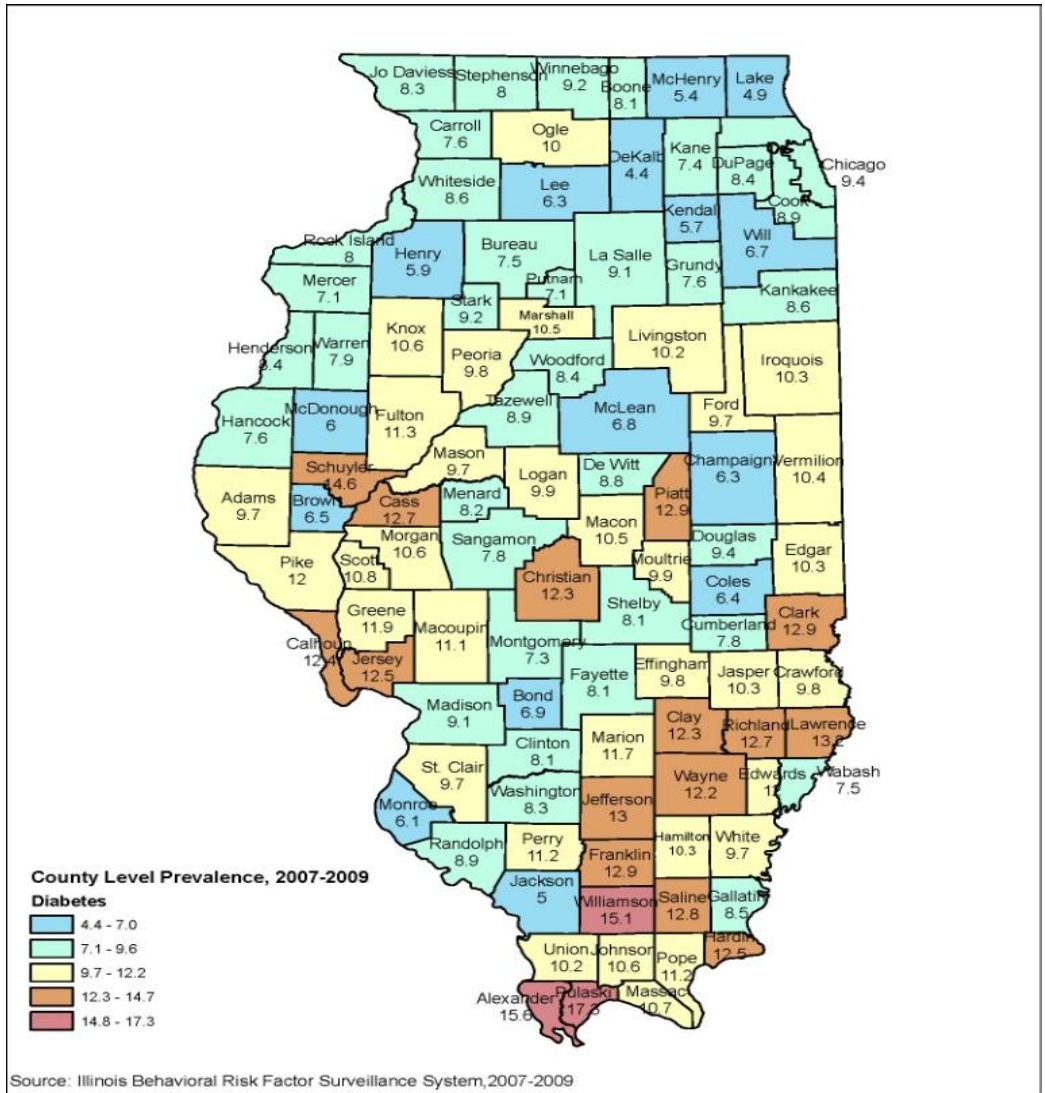
In Illinois in 2011, 17.6 percent of persons with diabetes reported avoiding medical care over the course of the year due to medical costs associated with diabetes.³ In 2011, there were 22,088 hospitalizations caused by diabetes.⁴



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

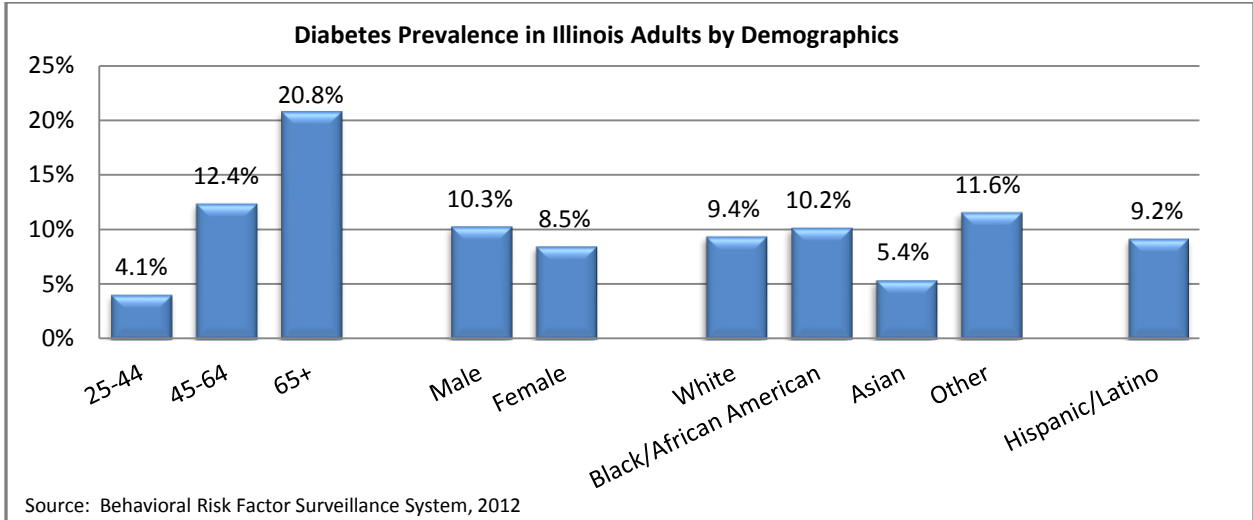
The rate of diabetes varies by county throughout Illinois. According to the 2007-2009 BRFSS, DeKalb County had the lowest rate of diabetes with 4.4 percent of the population and Pulaski County had the highest rate with 17.3 percent of the population. The map on the next page shows how the percentage of adults with diabetes differs in areas throughout the state.³

Percentage of Illinois Adults with Diabetes by County, 2007-2009



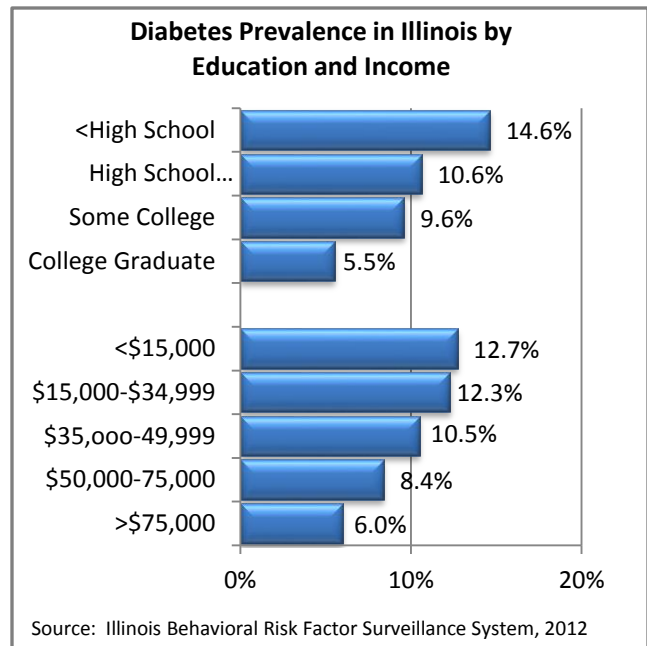
Diabetes Demographics

Diabetes prevalence differs among demographic populations and increases with age. According to the 2012 Illinois BRFSS, the percentage of adults who had been told they have diabetes was highest in adults age 65 years of age and above (20.8%) and in males (10.3%) compared to females (8.5%). The highest percentage of adults who had been told they have diabetes are in the “other” race category (11.6%), followed by black (10.2%), white (9.4%), and Asian (5.4%). Hispanic of any race showed a prevalence of 9.2 percent.³



Socioeconomic Status

The prevalence of diabetes has been associated with level of income and education. As the education and income levels increase, the prevalence of diabetes decreases, indicating people with the lowest socioeconomic status have the highest prevalence of diabetes. According to the 2012 Illinois BRFSS, the prevalence of diabetes is highest among adults with a household income of less than \$15,000 (12.7%) and lowest in the \$75,000 and above income bracket (6.0%). It is highest in adults with less than high school education and lowest in adults who graduated from college (14.6% v 5.5%).³



Children with Diabetes

In 2010, approximately 214,000 people in the U.S. younger than 20 years of age were newly diagnosed with diabetes.¹

SEARCH for Diabetes in Youth is 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.

Preliminary findings were discussed at the 2012 American Diabetes Association’s 72nd Scientific Sessions. Data from the SEARCH study shows the prevalence of both type 1 and type 2 diabetes has increased.

From 2001-2009, the prevalence of type 1 diabetes rose 23 percent and type 2 diabetes rose 21 percent. Data suggests approximately 168,000 Americans under the age of 20 have type 1 and 19,000 have type 2 diabetes. 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 also is the national rate of increase.

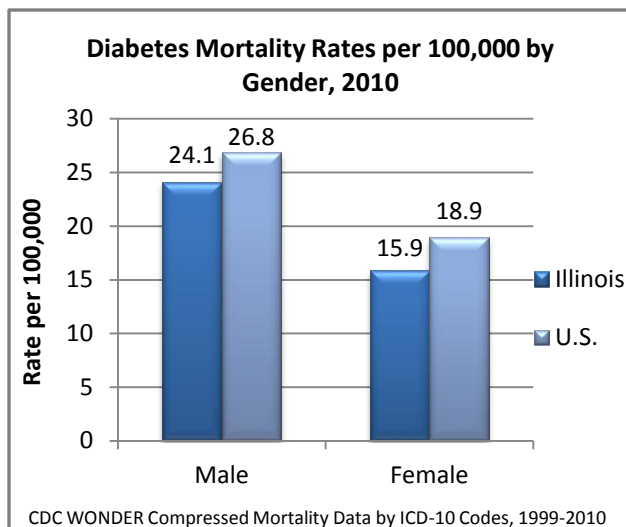
Additional preliminary findings from SEARCH include:

- 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.
- The rate of diabetes was highest among American Indian and non-Hispanic black youth.⁵

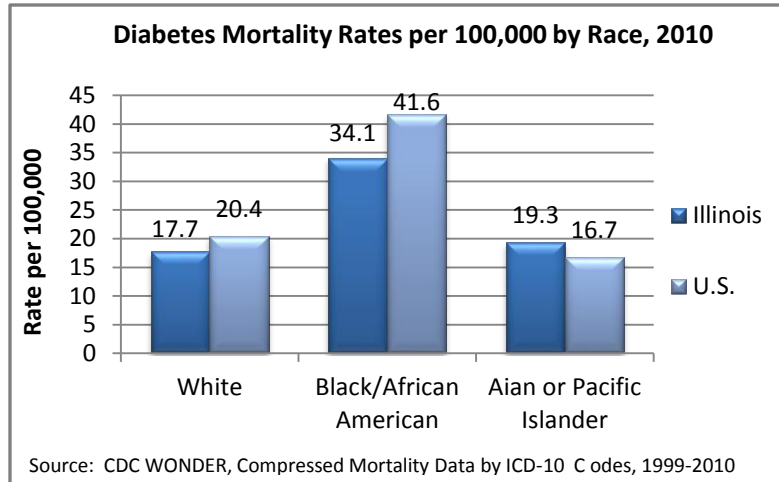
Diabetes Mortality

According to CDC 2010 data, diabetes is the seventh leading cause of death in the U.S. and eighth leading cause of death in Illinois.¹ In 2010, 2,499 people in Illinois died from diabetes, an average of seven people per day.⁶

According to CDC WONDER, Compressed Mortality data, in 2010, the diabetes adult mortality rate in Illinois was 18.5 per 100,000 compared to the national rate of 20.8 per 100,000. The diabetes mortality rate for males was significantly higher than for females in Illinois and the U.S. The national diabetes mortality rates for males and females were significantly higher than those of Illinois.



In Illinois and the U.S., the diabetes mortality rate of black/African Americans was significantly higher than for whites and Asian or Pacific Islanders. The national diabetes mortality rates for whites and black/African Americans were significantly higher than those of Illinois.⁷



Diabetes Cost

Chronic diseases are costly. They require funding, resources, and planning to combat and prevent. One challenge is the ability to quantify the amount of money spent on each disease. CDC Chronic Disease Prevention and Health Promotion and RTI International have developed a tool for states that estimates the financial burden of chronic disease, a Chronic Disease Cost Calculator. Version 2 of this Chronic Disease Cost Calculator was recently released. It calculates state-level annual medical expenditures and absenteeism for the following chronic conditions: arthritis; asthma; cancer; cardiovascular diseases (congestive heart failure, coronary heart disease hypertension, stroke and other heart diseases); depression; and diabetes. 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. 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. The Chronic Disease Cost Calculator estimates a 60.3 percent increase in medical costs, excluding absenteeism. The projections do not project inflation, assume no changes in policy or technology and exclude changes due to the Affordable Care Act.⁸

FUTURE PLANS

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

The commission members worked with the Department's Diabetes Prevention and Control Program staff to identify workgroup focus areas that helped in setting up strategic actions goals for reducing the burden of diabetes through the Illinois Diabetes State Plan. The state plan establishes a five-year roadmap for addressing diabetes prevention and control. The workgroups, which include commissioners, convened and addressed actions needed on an individual, group and systems level to make progress on diabetes prevention and control efforts. Other input for the workgroups comes from the Department's Diabetes Prevention and Control staff, other Department chronic disease programs, grantees, CDC, ITQL, other private and public partnerships to the Department, and diabetes caucus and coalition members. The workgroup areas targeted to assist in creating the state plan were: Data, Surveillance and Evaluation; Clinical and Patient Care; and Preventative Health and Community Awareness.

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 consumer's, 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 of many partners applying different and creative solutions to change environments, systems, communities and individual behaviors.
- Active involvement by public and private partners in communities to assure 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 identifying specific items you and/or your organization may get involved with or have plans to address.
- Partnering with the Illinois State Diabetes Commission or working with the Illinois Department of Public Health Diabetes Prevention and Control Program in preventing and controlling diabetes.
- Partnering with other organizations and local health departments to share goals and strategies for preventing and controlling diabetes.

The Diabetes State Plan evaluation will involve two components: 1) assessment of how the Department, local health entities and stakeholders utilize the plan; and, 2) assessment of goals and objectives outlined in the plan.

The Diabetes State Plan will be disseminated to the Illinois State Diabetes Commission and partners involved in the plan's development. The distribution list will include a broad range of state and local chronic disease professionals representing academic, government, public health, non-profit, business and advocacy organizations that represent people affected by diabetes and related risk factors. An online survey will be developed by the Department's Epidemiology and Surveillance Team and sent to state and local partners to assess the use and effectiveness of the plan. The Department's Diabetes Prevention and Control Program staff will collect and analyze results and provide feedback to all partners. Findings, including barriers and lessons learned, will be used to adjust program efforts and to assure continuous quality improvement. Accomplishments will be shared through Department communications, state and local success stories, and will be reported during regularly scheduled diabetes commission meetings.

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 Department's Diabetes Prevention and Control Program, diabetes commission and partners.

In conclusion, the Illinois State Diabetes Commission and the Department's Diabetes Prevention and Control Program 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.

Sources

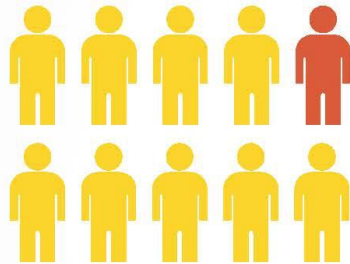
1. U.S. Centers for Disease Control and Prevention. National Diabetes Fact Sheet, 2011.
2. Institute for Alternative Futures, Diabetes 2025 Fact Sheets, 2011. “United States Diabetes Crisis: Today and Future Trends”: <http://www.altfutures.com/diabetes2025/>
3. Illinois Department of Public Health, Illinois Behavioral Risk Factor Surveillance System (BRFSS), 2007-2009, 2011-2012: <http://www.idph.state.il.us>
4. Illinois Department of Public Health Emergency Medical Services Data Reporting System, 2011.
5. American Diabetes Association: Diabetes Rates Increase Significantly Among American Youth, June 9, 2012: <http://www.diabetes.org/for-media/2012/sci-sessions-SEARCH.html>
6. Illinois Department of Public Health, Vital Statistics.
7. U.S. Centers for Disease Control and Prevention WONDER, Compressed Mortality data, 2000-2009: <http://wonder.cdc.gov/cmfi10.html>
8. U.S. Centers for Disease Control and Prevention, Chronic Disease Prevention and Health Promotion. Chronic Disease Cost Calculator Version 2: <http://www.cdc.gov/chronicdisease/resources/calculator/index.htm>

The Impact of DIABETES in Illinois

Diabetes is a disease in which blood glucose levels are above normal. Insulin keeps blood glucose levels low. Type 1 diabetes occurs when not enough insulin is produced and type 2 occurs when insulin is not used as it should be.



1 In Illinois, approximately **800,000 adults** have diagnosed diabetes and another **500,000 adults** are not aware they have diabetes.



2 In 2012, **9.4% of adults** in Illinois had been **diagnosed with diabetes**.

3 In 2010, in Illinois, the average **cost of treating a person** with diabetes was **\$6,490**, or approximately **\$5 billion**.



4 In 2010, in Illinois, the average employed person with diabetes **missed 2 days of work** due to diabetes, totaling **753,000 missed days** of work and \$183 million in lost productivity and wages.

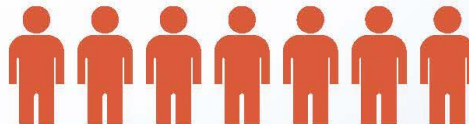
5 In 2011, there were **22,088 hospitalizations** in Illinois caused by diabetes.



6 Diabetes is the **7th leading cause of death** in the United States and **8th leading cause of death** in Illinois.



7 In 2010, **2,499 people** in Illinois **died from diabetes**. That's an average of **7 people per day**.



1 2 Illinois Department of Public Health, Behavioral Risk Factor Surveillance System 3 4 Centers for Disease Control and Prevention Chronic Disease Cost Calculator version 2011 data 5 Illinois Department of Public Health Emergency Medical Services Data Reporting System, 2011 6 7 Illinois Department of Public Health Vital Statistics, 2010

