



State Addresses Growing Diabetes Problem

Rising diabetes rates in the U.S. are causing public health agencies to seek ways to contain this growing threat to health. The federal Centers for Disease Control and Prevention projects that 20% to 30% of Americans will be diagnosed with diabetes by 2050. Diabetes rates are rising for all groups; but some minority populations are especially susceptible, so it may make sense to focus public health measures in places with large minority populations while also reaching out to the entire population.

Diabetes can be thought of as several diseases that share one result: excessive glucose (blood sugar) levels in the blood. It can result from any of three major causes: damage to the pancreas by the immune system; changes in how the body processes blood sugar; or pregnancy—referred to as type 1 diabetes, type 2 diabetes, and gestational diabetes.

Type 1 diabetes (sometimes called “juvenile” or “insulin-dependent” diabetes) develops because a person’s immune system targets the cells in the pancreas that make insulin. Since insulin enables muscles and other body tissues to use glucose, the result is a buildup of glucose in the blood. The kidneys start producing much more urine to eliminate some of the glucose. Symptoms include increased thirst and urination, weight loss, constant hunger, fatigue, and blurred vision. In type 1 diabetes, symptoms typically appear over a short period, although insulin-producing cells can begin to be destroyed long before symptoms appear. Persons with type 1 diabetes must get insulin injections for the rest of their lives. Fortunately, only 5% to 10% of diabetes cases are of type 1. Its

cause or causes are unknown, although researchers have suggested various possible triggers for the harmful immune-system action.

Type 2 diabetes has a quite different source: Changes in the body’s use of blood sugar. For reasons that researchers are seeking to understand, some people’s tissues gradually become less able to use insulin to ‘burn’ blood sugar—they become “insulin resistant.” That would be helpful for survival in a famine, because the person would use fewer calories. But when calories are plentiful, the result is high blood sugar and resulting damage to many organs. Type 2 diabetes is the kind that is rapidly increasing in the U.S. It is somewhat more common in people with ancestry in Africa, Latin America, the Pacific islands, and some Asian areas—including American Indians. (A possible explanation is that famines were more common in those areas than in other places, particularly Europe. Genes promoting insulin resistance—if present at some early time in Europeans—would have tended to die out, because some people with such genes could have developed type 2 diabetes at young enough ages to reduce their ability to survive or to have children. In areas with periodic famines, such genes would instead have aided survival, and so would not have died out.)

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Major risk factors for type 2 diabetes are being overweight; lack of physical activity; and increasing age. Its symptoms develop more slowly than for type 1 diabetes. They may include increased thirst or hunger, fatigue, increased urination, weight loss, and delayed healing of sores or wounds. But some people with type 2 diabetes have no symptoms, making periodic testing of blood sugar advisable. Effects of either type 1 or 2 diabetes can include heart disease, stroke, blindness, amputation, and kidney failure.

Gestational diabetes develops in the latter part of 3% to 8% of pregnancies. It may not have symptoms, and usually disappears after pregnancy. But women diagnosed with it have a 40%-60% chance of developing type 2 diabetes within 5 to 10 years. Gestational diabetes is caused by a surge of hormones in pregnancy, or an insulin deficiency. Like type 2, gestational diabetes is more common in some ethnic groups and in those with family histories of diabetes. Physical activity and maintaining a healthy weight can help prevent it.

There are several other, rarer types of diabetes, related to genetic disorders, pancreatic diseases, hormone disruptions, infections, and some medications.

Medical Response

Diagnosis

Three standard tests are used to diagnose diabetes. The first, typically used on children and non-pregnant adults, is the fasting blood glucose test. It checks blood glucose levels after an 8-hour fast. A second test is the oral glucose tolerance test (OGTT). It checks blood glucose levels 2 hours after drinking a glass of water and 75 grams of glucose. A third method is random testing of a person's blood glucose levels at various times. An abnormally high level on one of these tests may result in a diagnosis of prediabetes or diabetes. (In prediabetes, blood glucose levels are higher than normal but not yet high enough to be considered diabetic.)

Treatment

For type 1 diabetes, treatment consists of careful eating, physical activity, and insulin injections. A person with type 1 diabetes must monitor blood glucose levels frequently and carefully. Doctors may also prescribe additional medicine.

Type 2 diabetics must also include healthy eating, physical activity, and blood glucose testing in their daily routines to manage the disease. Usually, doctors also prescribe one or more medicines—tablets, insulin, or other injectable products—to help maintain healthy blood glucose levels.

Among people with type 1 or 2 diabetes, 65% will die of cardiovascular disease. Since diabetics are at high risk for cardiovascular disease, they also need to have healthy blood pressure and cholesterol levels. This may be achievable with healthy eating and physical activity, but drugs may also be needed.

Two recently reported studies found stomach surgery to be more successful in treating type 2 diabetes than standard medical treatments for diabetes, at least for obese diabetic patients. The surgery involves stapling the stomach and rerouting the small intestine, limiting the amount that can be eaten at one time. These studies were relatively small, and it is unclear whether such surgery would be as successful for non-obese patients.

Similarly, British researchers reported that following an extremely low-calorie diet—600 calories a day—for 2 months could stop obesity-related type 2 diabetes in patients who have had the disease for years. The study was small, and it is unclear how effective this diet would be for maintaining long-term effects.

Medical providers and researchers are also currently debating whether either a vegetarian or a vegan diet could bring complete remission of type 2 diabetes. Some researchers believe that limiting or eliminating animal products from a diabetic person's diet may be enough to normalize blood glucose levels without medications.

Although there are no cures yet for diabetes, researchers are working on them. Possibilities being explored include:

- Pancreas transplants.
- Transplanting islet cells (which make insulin) into the pancreas.
- Using an attached machine that monitors glucose levels and has an insulin pump to control them—in effect an artificial pancreas.
- Genetic manipulation (fat or muscle cells that do not normally make insulin could have an insulin-producing gene inserted into them; the resulting “pseudo” islet cells would be transplanted into people with type 1 diabetes).

Illinois Data

A 2010 statewide, voluntary survey by the Illinois Department of Public Health (IDPH) found that lower-income respondents reported higher rates of diabetes than respondents with higher incomes (see Figure 1 on next page).

The survey also examined diabetes by education and age level. It found that 17% of respondents over age 25 with less than high school educations had diabetes, versus only 6% of college graduates (see Figure 2 on next page). Diabetes rates also rose with age (Figure 3 on next page).

By race or ethnicity, diabetes was reported by 7% of white, 14% of African American, and 7% of “other” respondents (Figure 4 on next page). A similar survey in 2009 found that 10% of respondents with Hispanic or Latin origin had diabetes, versus 8% of respondents with other than Hispanic or Latin origins (Figure 5 on next page). In that survey, Hispanic or Latin origin could include Caribbean descent even though some such persons are of African ancestry.

IDPH has also conducted periodic surveys on the percentages of adults who are diabetic by county (Figures 6 and 7). From 1996 to 2000, the three Illinois counties with the highest rates of diabetes were Alexander (13.3%), Gallatin (12.5%), and Hardin (11.1%). From 2007 to 2009, the three highest counties were Pulaski (17.3%), Alexander (15.6%), and Williamson (15.1%). The data by county suggest an overall increase in diabetes in Illinois for the last 10 years, mirroring national numbers.

National and State Actions

The National Institutes of Health and Centers for Disease Control and Prevention (CDC) both post online educational information on diabetes, including methods of prevention and treatment. The CDC also has a Diabetes Training and Technical Assistance Center (DTTAC), which trains diabetes lifestyle trainers to assist local, state, and national partners

in developing and growing highly effective diabetes prevention and control programs.

Many nonprofit associations focus on diabetes education, awareness, policy, and other issues in Illinois. They include the Illinois Diabetes Coalition; the Illinois Diabetes Caucus; and the Illinois chapters of the American Diabetes Association and Juvenile Diabetes Research Fund.

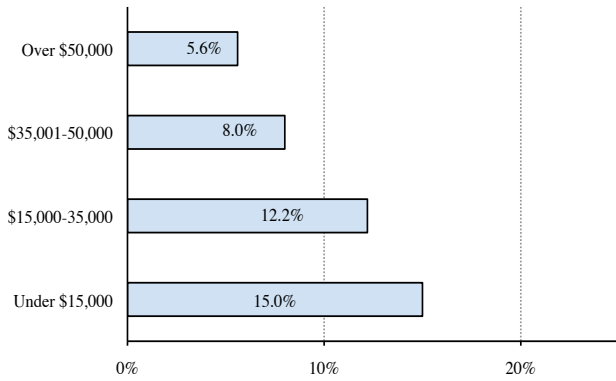
IDPH has administered the Diabetes Prevention and Control Program since July 2010; it previously was under the Department of Human Services. A Diabetes Prevention and Control Program advisory group issues annual reports on the status of diabetes in Illinois, and offers plans to address the disease. The 2011 annual report recommended the following actions:

- Work with communities to provide diabetes prevention and control strategies.
- Help high-risk groups change their lifestyles to prevent diabetes.
- Collaborate with other IDPH chronic disease programs to guarantee maximum information distribution.
- Issue a chronic disease burden report, including a diabetes section, in 2012. □

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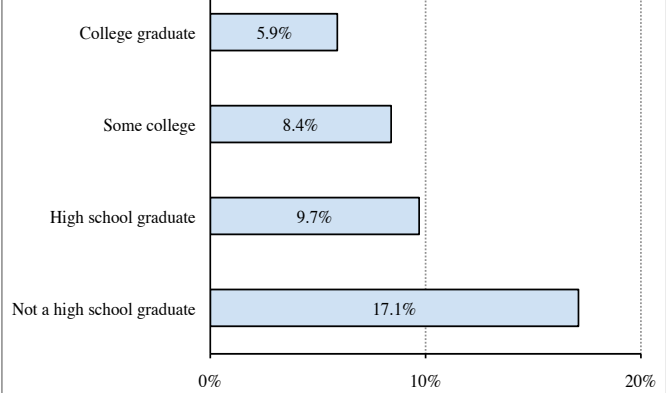
Rates of Diabetes Among Adults

Figure 1: Illinois Diabetes Rates by Household Income



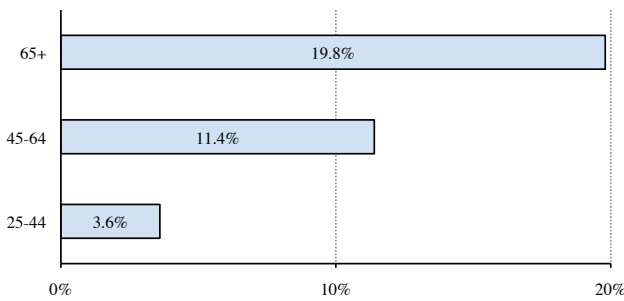
Note: All persons surveyed were at least 18 years old.

Figure 2: Illinois Diabetes Rates by Educational Level



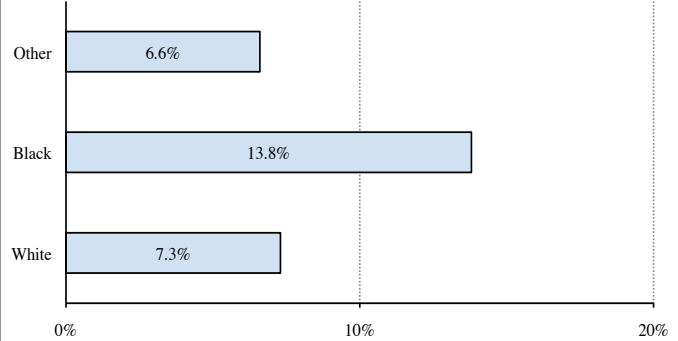
Note: All persons surveyed were at least 18 years old.

Figure 3: Illinois Diabetes Rates by Age Range



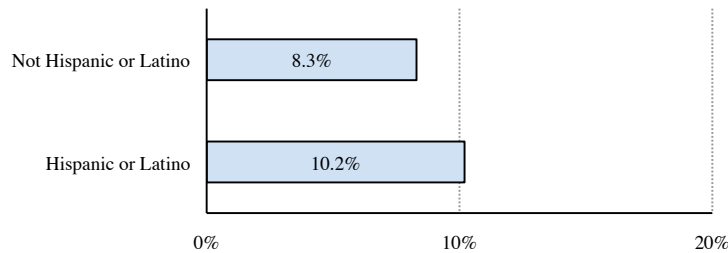
Note: Too few persons under age 25 reported having diabetes to be considered reliable.

Figure 4: Illinois Diabetes Rates by Race



Note: All persons surveyed were at least 18 years old.

Figure 5: Illinois Diabetes Rates by Ethnicity



Note: All persons surveyed were at least 18 years old.

Source: IDPH, Illinois Behavioral Risk Factor Surveillance System, Illinois and Strata Area Prevalance Data (for diabetes, 2010, downloaded from IDPH Internet site).

Diabetes Incidence by County

Figure 6: Illinois Counties by Percentage of Adult Population With Diabetes (1996-2000)

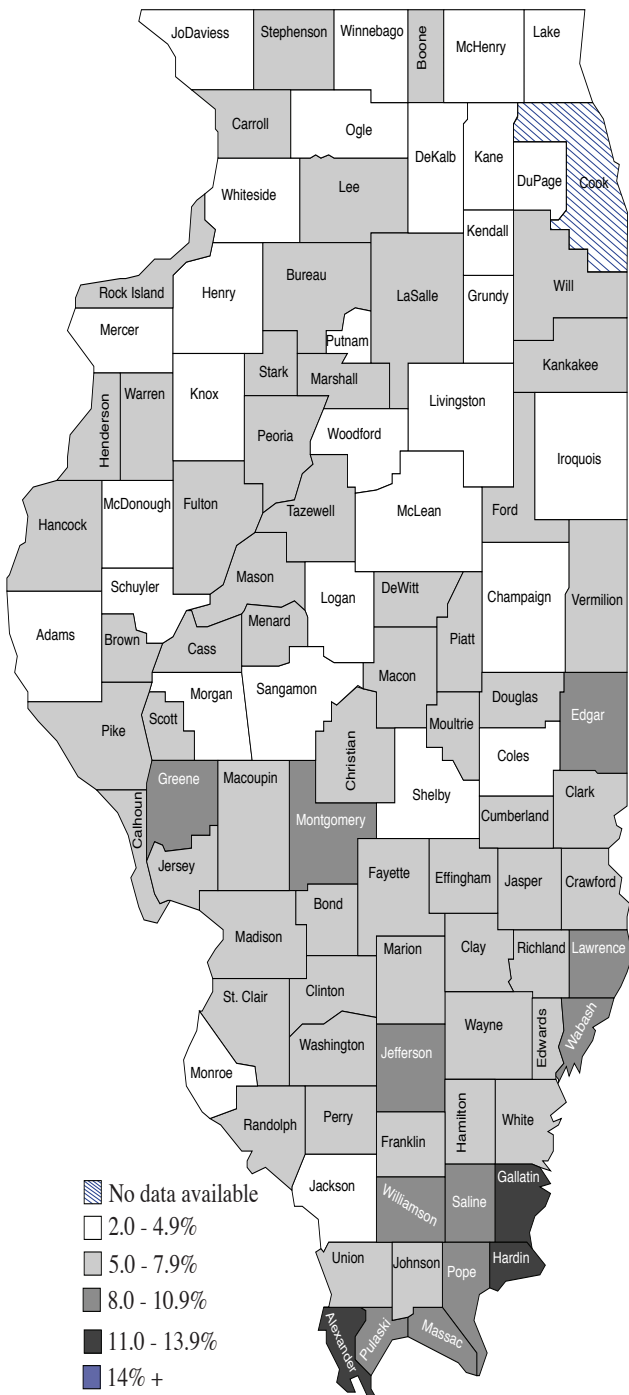
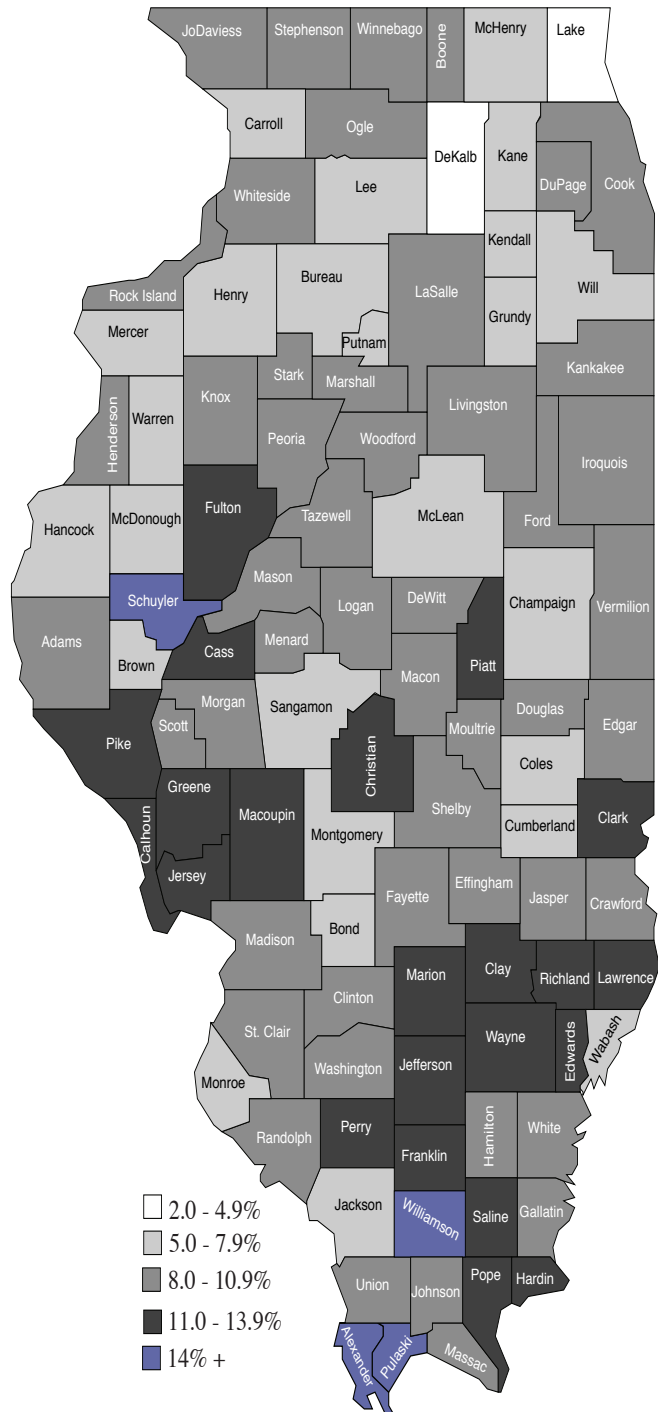


Figure 7: Illinois Counties by Percentage of Adult Population With Diabetes (2007-2009)



Source: IDPH, Illinois Behavioral Risk Factor Surveillance System, County Level Prevalence Data (for diabetes, 1996-2000 and 2007-09, downloaded from IDPH Internet site).

Child Vaccination is Impeded by Confusion, Costs

Vaccines protect against disease-causing agents, such as viruses, bacteria, and other pathogens, by prompting the immune system to prepare to fight them. A vaccine typically uses a weakened or killed form of the pathogen. After it enters the body, the immune system makes cells and antibodies that target that kind of pathogen. After it is destroyed, the body stores the experience in its immune ‘memory’ and keeps some of the new cells and antibodies in case the same kind of pathogen shows up again.



Major public health agencies and groups—including the federal Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians—issue vaccination recommendations, but states set their own child vaccination schedules. States typically use the CDC’s recommended schedule.

The CDC and other major health authorities regularly advocate increased childhood immunization, distribute information, and collect data. A 2010 CDC survey found that approximately 73% of children between 19 and 35 months were fully vaccinated. Illinois’ rate was about 75%.

The full vaccination schedule recommended by the CDC for the first 23 months is as follows:

Doses Vaccine

- 4 Diphtheria and tetanus toxoids and acellular pertussis (DTAP)
- 4 *Haemophilus influenzae* type b (Hib)
- 3 Hepatitis B (HBV)
- 1 Measles-mumps-rubella (MMR)
- 3 Polio (inactivated)
- 1 *Varicella zoster* virus (VZV), which causes chickenpox in children and shingles in older adults
- 1 Hepatitis A (HepA)
- 3 Rotavirus (RV)
- 4 Pneumococcal (PCV)
- 1 Meningococcal (MCV4)
- 1 Annual influenza (starting at 6 months)

Health organizations such as those mentioned above have had problems getting parents to vaccinate their children. These delays may be due to supply disruption, high costs, and confusion about vaccine safety.

Vaccine Supply, Costs, and Confusion

Shortages of the Hib, HBV, influenza, VZV, and meningitis vaccines have resulted in many persons not receiving the entire series of recommended vaccines. The American Academy of Pediatrics reported that a recent shortage of Hib vaccine prevented many children from getting the final dose of it. The AAP recommends adoption of electronic health record systems. Such systems would allow medical providers to track children who have not received vaccinations and encourage parents to finish them.

The CDC estimates that the cost for a full immunization has increased sixfold since 1995. This can be attributed to newer or more expensive vaccines; replacing old vaccines with substitutes; and high storage and administration costs. A 2008 study of private medical providers found that half of surveyed pediatricians and family physicians had to delay buying some new vaccines due to high costs. Among the surveyed providers, 5% of pediatricians and 20% of family physicians reported seriously considering ending vaccination (even of privately insured patients) due to inconsistent coverage and low reimbursement rates from insurers.

Due to statements made on many seemingly credible health Websites and celebrity opponents of vaccinations, many physicians have spent much time in office visits trying to persuade parents to follow published medical recommendations on vaccines. In an effort to educate parents about vaccinations, the CDC, AAP, and other medical authorities are trying to post reliable, peer-reviewed and evidence-based information about vaccines on the Internet.

There has been concern that thimerosal (a preservative containing ethylmercury, formerly used in various childhood vaccines) may cause serious harm and potentially neuropsychological problems, including autism. A 1998 review of all products regulated by the Food and Drug Administration for mercury content spurred an assessment of thimerosal use in vaccines. The results of the assessment found uncertainty about how much ethylmercury babies receive from vaccines and how detrimental it is to them, prompting the FDA to seek recommendations from the CDC and AAP. In July 1999 the CDC and AAP issued a joint statement saying that although there was no evidence to suggest thimerosal was harmful, it should be removed from vaccines as a precaution. It has since been eliminated in vaccines recommended for children up to age 6 except inactivated flu vaccines. However, repeated scientific studies since 1999 have found no link between thimerosal exposure and serious harm or neuropsychological problems in children. Some

pediatricians and health organizations have criticized the joint recommendation; they think it was rushed and excluded input from other important parties. As an example, since the recommendation was made so quickly, makers of the hepatitis B vaccine could not produce thimerosal-free versions immediately. Health officials worried that the resulting delay of a few months would result in newborns not being vaccinated against hepatitis B.

Research in genetics and vaccines is starting to look into the possibility of personalized vaccinations. As genetic technology progresses, scientists hope to develop a cost-effective method of sequencing everyone's DNA. Combining such information with vaccine advancements would open the possibility of making a vaccine specific to a person's genes. This might help avoid side effects of vaccines such as allergic reactions.

Federal and State Actions

A 1986 federal law provided for a National Vaccine Injury Compensation Program (NVICP), which was established in October 1988. The U.S. Department of Health and Human Services, U.S. Department of Justice, and U.S. Court of Federal Claims jointly administer the NVICP, which works to ensure vaccine supply, stable costs, and a no-fault compensation alternative to persons injured by vaccines.

Nineteen states, excluding Illinois, allow parents to exempt their children from vaccinations

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Child Vaccination is Impeded by Confusion, Costs

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for other than medical or religious reasons. (Such broader, individual reasons are often called “philosophical” objections.) Iowa and New Jersey bills propose to create such exemptions. All states allow parents to exempt children from mandatory vaccinations for medical reasons, and 48 do so for religious reasons. State exemption laws are categorized below.

<i>Medical conditions</i>	<i>Religious beliefs</i>	<i>Personal reasons</i>
All states	All states except Mississippi and West Virginia	19 states

A Legislative Research Unit survey of 18 states (the 10 most populous states; neighboring states; and regional representatives) found many current bills on immunization. The table on the next page summarizes recent laws and bills on exemptions, awareness and information, mercury levels, human papillomavirus (HPV), and other vaccine-related issues.

Illinois laws and bills

Public Act 97-117 (2011), enacted by H.B. 1338 (Gabel-Currie-Feigenholtz et al.—Delgado-Kotowski-Trotter et al.) made it easier for the Illinois Department of Public Health (IDPH) to add information to its Illinois Comprehensive Automated Immunization Registry Exchange (I-CARE). Medical providers can send the Exchange information on immunizations unless patients (or parents of minors) object, rather than having to get their active consent as before. IDPH can use the information to evaluate the sufficiency of immunizations for any school student and people in any geographic area, ethnic group, or other category, subject to privacy restrictions.

Public Act 97-494 (2011), enacted by H.B. 1707 (Gabel-Riley-Colvin et al.—Hunter-Schoenberg-Noland et al.) expanded a requirement that the Department of Children and Family Services (DCFS) work with IDPH to post information on its Website on the value of vaccinating children in day care against influenza, by adding pertussis and other diseases that have vaccines. The information must include the incidence and severity of such diseases; availability of vaccines; and importance of immunizing children and persons in close contact with them.

House Bill 1961 (D.Burke) would direct IDPH to seek federal funds for school-based flu vaccine programs. It was assigned to the House Human Services Committee but re-referred to the Rules Committee.

House Bill 5013 (Gabel-Yarbrough-M.Davis—Steans-Garrett-Trotter-Landek et al.) would require public and nonpublic schools to make their fall immunization data publicly available by December 1 every year. It has passed both Houses. □

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Table 1: States' Recent Laws and Current Bills on Childhood Vaccination

Laws

<i>State and citation</i>	<i>Description</i>
2012 Ga. Act 673	Required day-care and child-care learning centers to give parents flu vaccine information each September.
2011 Ga. Act 243	Required hospitals to provide educational information on pertussis (whooping cough) and its vaccine to new parents.
Illinois P.A. 97-117 (2011)	Authorized an immunization data registry to monitor coverage rates, prevent under- and over-immunization, and document required immunizations for school and childcare admissions.
Illinois P.A. 97-494 (2011)	Required Department of Public Health to post information on its Website to increase the awareness of parents with children in day care of the benefits of flu and pertussis vaccinations.

Bills (These bills have not passed their houses of origin unless so noted.)

<i>State and number</i>	<i>What the bill proposed</i>
EXEMPTIONS	
Ariz. H.B. 2383	End requirement of immunizations for college enrollment.
Ariz. H.B. 2846	Allow exemptions from childhood vaccinations only if an exemption form is submitted every year.
Iowa S.F. 370	Create a philosophical exemption for vaccinations.
Ill. H.B. 3997	Prohibit children from attending school unless properly vaccinated or medically or religiously exempted.
N.J. A.B. 509	Create a philosophical exemption for vaccinations.
N.J. A.B. 1368	Grant a “conscientious” exemption for specific vaccinations based on any sincerely held or moral objection to a vaccine.
N.Y. A.B. 593	Extend medical exemptions to children. In addition to physicians, allow nurse practitioners and physician assistants to provide written medical opinions exempting children from vaccines that may be harmful to their health.

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Table 1: States' Recent Laws and Current Bills on Childhood Vaccination

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<i>State and number</i>	<i>What the bill proposed</i>
AWARENESS AND INFORMATION	
Cal. A.B. 1192	Require hospitals to distribute information on pertussis to new parents, and require state Department of Public Health to post educational information on its Website.
Cal. A.B. 2109	Require vaccine exemption form to be accompanied by a form signed by a medical practitioner with information on benefits and risks of immunizations. Passed Assembly 47-26; awaiting assignment to a Senate committee.
Ill. H.B. 1961	Require Illinois Department of Public Health to apply for federal money to fund, build infrastructure for, promote, and expand school vaccination programs for seasonal flu vaccine.
Ill. H.B. 5013	Require every school district to disclose its immunization data (such as rates of immunization against various diseases). Passed both houses.
Mass. H.B. 348 and S.B.'s 503 and 529	Create a childhood vaccine program and immunization registry.
Mass. H.B.'s 582 and 3948	Require public and private schools to send information on benefits of annual flu vaccine to parents of children 6 months to 18 years old.
Mass. S.B. 1082	Require state Department of Public Health to create educational publications on vaccines for premature babies.
Mass. S.B. 2120	Create a fund to cover costs of buying, storing, and distributing childhood vaccines; set up an advisory council to recommend types of vaccines to buy; and require health insurers to pay for routine childhood vaccinations.
N.Y. A.B. 8231	Require every school to distribute written information on meningitis vaccination to all 7th graders and their parents, and to keep meningitis vaccination records of such students.
Pa. S.B. 378	Create an Advisory Committee on Immunization Practices to issue recommendations for flu vaccines for children.

*State and
number*

What the bill proposed

MERCURY CONTENT

- Mass. H.B. 2336 Prohibit giving flu vaccines with even trace amounts of mercury to pregnant women or children under age 3 unless there is a flu epidemic, an emergency, or a shortage of mercury-free vaccines.
- N.J. A.B. 2407 Phase out use of mercury in childhood influenza vaccines by 2014.

HUMAN PAPILLOMAVIRUS (HPV)

- Iowa S.F. 86 Require school districts to add information on HPV and HPV vaccine to health curricula in grades 7 and 8.
- Iowa S.F. 2336 Require state Department of Public Health to have HPV vaccine awareness programs. Passed both houses, sent to Governor.
- Mo. H.B. 1439 and S.B.'s 496 and 800 Require information on HPV vaccine to be included in any course material and instruction relating to human sexuality and sexually transmitted diseases.
- N.Y. A.B. 343 Allow medical practitioners to administer HPV vaccine to a person below age 18 without parental consent.
- N.Y. A.B. 699 Require immunization against HPV by grade 6.
- N.Y. A.B. 2360 Encourage immunization against HPV by grade 6.
- Va. H.B. 1112 Remove requirement for HPV vaccination for children before grade 6. Passed House 62-34 and assigned to a Senate committee, where it has been continued to 2013.

MISCELLANEOUS

- Mo. H.B. 1990 Require medical practitioners to provide a list of ingredients in a vaccine before administering it.
- N.J. A.B. 920 Not require children under age 6 to receive Hepatitis B vaccine to start school if their mother tested negative for Hepatitis B in her third trimester of pregnancy. At age 6, a physician would determine whether the child needs the vaccine.
- N.Y. A.B. 608 Require children to receive a meningitis vaccine when entering grade 7.

Autism Enters the Public Eye

The federal Centers for Disease Control and Prevention recently reported a 25% rise in diagnoses of autism-spectrum disorders (ASDs) from 2006 to 2008. The prevalence of such diagnoses in children up to age 8 rose from 1 in 110 to 1 in 88. Explanations offered by researchers for the increase include more awareness of the disorders; an expansion of the spectrum's definition; and/or an increase in actual incidence. Diagnosing ASDs is highly complex, causing challenges in understanding the prevalence in the population.

Autism was first described in the 1940s as a disease caused by unloving mothers. As research progressed, scientists classified it as a neurological developmental disorder. Today autism and related disorders are described as a "spectrum" due to the many types and severities of symptoms.

Persons with autism may show differences in language, social behaviors, routines, and interactions with objects. As examples, they may have difficulty speaking to or looking other people in the eye; sharing emotions; or empathizing with others. They may also exhibit routines or repetitive behaviors such as repeating words, obsessing over schedules, or having specific ways of arranging items.

Scientists have limited knowledge about exact cause(s) for autism. Much research is being

done on possible genetic and environmental influences. Research so far suggests that at least 12 separate genes may affect whether a child will be autistic. Finding genes involved with autism is difficult, for several reasons. First, every autistic child has different symptoms, which often appear to be related to different genes. Second, some genes can control the effects of other genes; so it may be unclear whether a gene of interest is influenced by another gene. Third, there are tens of thousands of genes located on a person's 46 chromosomes, making the search for genes involved in autism similar to seeking a needle in a haystack.

Some studies of autism have been done on twins—either identical (essentially identical genetically) or fraternal (as similar genetically as children born to the same parents from different pregnancies). These studies show that if one identical twin is diagnosed with autism, there is a 60% chance that the other is; but if one fraternal twin is diagnosed with autism, there is no more than a 6% chance that the other is. This implies a significant genetic effect on the development of autism; but if genes were the only determining factor, then (apart from inconsistencies in diagnosis) every autism diagnosis in an identical twin should be matched by an autism diagnosis in the other twin if still alive.



Family histories of autism have also been found. If a child has autism, there is a 2% to 8% probability that any given sibling also has it. Siblings of autistic children also have higher rates of autism-like symptoms, such as delayed language development.

Studies by teams of researchers working independently have recently identified many specific gene mutations (changes in genes) that strongly increase the likelihood of developing autism. Mutations may already be present in a parent's genes, or may be new in the child (that is, not passed on by either parent). Due to the possibility of such new mutations (among other reasons), it is not possible to predict with assurance that children of two parents will not have autism even if neither of them is known to have any genes related to autism. But genetic counselors can discuss the risks of autism and other problems with persons considering becoming parents.

The likelihood of new mutations significantly rises with parental age—especially the father's.

Persons diagnosed with autism also have a genetic disorder separate from autism in about 5% of cases. Such disorders include Prader-Willi Syndrome, fragile X syndrome, and tuberous sclerosis. (Symptoms of these disorders can include cognitive disabilities and physical abnormalities.)

Although genetics is widely believed to play a role in autism development, specific genetic abnormalities thought to be related to autism are found in only about 7% to 8% of diagnoses. However, scientists strongly believe the genetic correlation will increase as genetic technology advances.

Scientists have also examined possible environmental causes of autism. During brain development in gestation and early childhood, a child is highly susceptible to injury if exposed to toxic substances. Researchers have found direct evidence of toxic chemicals' contributing to autism development. Such chemicals include misoprostol, which is used to prevent gastric ulcers; chlorpyrifos, used in some pesticides; and methylmercury, which may be in fossil fuel byproducts and some water.

Autism and Vaccines

Fears that vaccines may cause autism have been almost completely laid to rest. They began with a 1998 paper in the British medical journal *The Lancet*. Its primary author, Andrew Wakefield, claimed to have found a link between the measles-mumps-rubella (MMR) vaccine and a

“new syndrome” of autism in children. But other scientists were unable to reproduce his results. The British General Medical Council, after an investigation, charged Wakefield with multiple counts of misconduct. *The Lancet* retracted the paper in 2010, and Wakefield was stripped of his medical license. However, the MMR vaccination rate of children in Britain dropped sharply after the paper's publication. The U.S. had a higher incidence of measles in 2008 than in any year since 1996; over 90% of those infected had not been vaccinated. The Institute of Medicine of the U.S. National Academy of Sciences and the Centers for Disease Control and Prevention have since studied the MMR vaccine and autism, and found no evidence of a causal relationship.

Autism Awareness and Funding Programs

National organizations such as the IAN Project and Autism Speaks raise awareness about scientific research, promote funding, and encourage parental and community involvement in the scientific process. Other campaigns, such as the Miracle Project, enable children with special needs to express themselves through music, dance, acting, and writing. To prevent bullying of autistic children, the Autism Safety program provides suicide-prevention resources and raises awareness of mistreatment of persons with autism.

At the state level, autism awareness programs focus on funding. A survey of 18 states (the 10 other most populous states, neighboring states, and regional representatives) and Illinois found 7 states, including Illinois, that have special license plates to raise money for autism research. Three states currently have bills that would allow voluntary tax checkoffs to support autism programs.

Other ideas include a New York bill to provide a tax credit for expenses paid by parents on behalf of their autistic child. Autism Speaks reports that 30 states, including Illinois, mandate autism therapy in health insurance coverage. □

Caroline Coatney and Jennifer Le, Research Assistants

“Whenever I hear anyone arguing for slavery, I feel a strong impulse to see it tried on him personally.”

Abraham Lincoln

BrainyQuote.com

Book Review

Nobody Calls Just to Say Hello: Reflections on Twenty-Two Years in the Illinois Senate by Philip J. Rock with Ed Wojcicki, SIU Press, 2012

A new book by former Senate President Philip J. Rock with Ed Wojcicki offers a look at the inner workings of the General Assembly, as well as a picture of Rock's life and years of public service. Wojcicki, formerly a journalist and now Associate Chancellor for Constituent Relations and Chief of Staff to the Chancellor of the University of Illinois at Springfield, did 28 interviews with Rock to capture his stories. He also interviewed many of Rock's contemporaries, including former Governors James R. Thompson and Jim Edgar; current or former Senate Presidents John J. Cullerton, Emil Jones, Jr., and James "Pate" Philip; and Speaker of the House Michael J. Madigan. The result—written in the first person from Rock's point of view—tells the tale of his eventful years in Illinois politics.

He spent some early years in seminary, but changed course to get a law degree and enter politics. The book describes his time as an Assistant Attorney General and assistant Cook County state's attorney; his election to the Illinois Senate and to the Democratic State Central Committee; and his seven consecutive terms as Senate President, a record for Illinois.

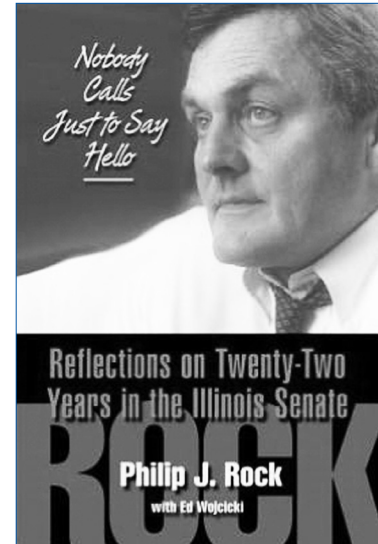
Some of his first major legislative victories came in 1975 with enactment of the Illinois Horse Racing Act of 1975 and the Abused and Neglected Child Reporting Act.

He also helped create a school for deaf and blind children that year (it would later be renamed for him). In 1985 he got several major education reforms enacted, including mandatory testing of students, basic skills tests for teachers, and creation of the Illinois Mathematics and Science Academy. The book describes the complex negotiations leading to the income tax increases of 1983 and 1989, and creation of the Illinois Sports Facility Authority in 1986 to help keep the White Sox in Chicago. Rock also takes pride in his assistance with the Illinois Women in Government conferences, and mentions that he appointed the first female Secretary of the Senate, Linda Hawker, in 1987.

Rock never had a large Democratic majority during his 14 years as Senate President, so a constant element in the book is his efforts to hold together a caucus known for being fractious. He also notes his willingness to work with Republicans. Rock says he had a good relationship with Governor Thompson—even after taking Thompson to court in 1981 after Thompson allowed the election of Republican David C. Shapiro as Senate President without a quorum of 30 senators. The Illinois Supreme Court declared the election invalid, and Rock was later re-elected as Senate President, but he said there were no "lasting ill effects" on his relationship with Thompson.

His connections with other powerful figures of the time are another focus of the book. Rock's tenure as Senate President coincided in part with the tenure of House Speaker Madigan; the two even entered the General Assembly in

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the same year (1971). In interviews with Wojcicki, both men reported having different styles; but Rock discounts rumors that they did not get along, describing a good working relationship combined with a "civil and friendly rivalry."

Rock also recounts his disappointments, such as his defeat for the Democratic nomination for the U.S. Senate in 1984. He acknowledged being uncomfortable with campaigning, but was still hurt by the loss. He continued serving as Senate President until retiring in 1993 and returning to his Chicago law practice.

The book combines decades of legislative history with reminiscences and memories of dozens of well-known figures in Illinois politics. Unfortunately for readers, Wojcicki joked in a recent speech that "the best stories are not in the book." Even so, readers with an interest in the intricacies of the Illinois General Assembly will likely find it an engaging and worthwhile read. □

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Senior Research Associate

Abstracts of Reports Required to be Filed With General Assembly

The Legislative Research Unit staff is required to prepare abstracts of reports required to be filed with the General Assembly. Legislators may receive copies of entire reports by sending the enclosed form to the State Government Report Distribution Center at the Illinois State Library. Abstracts are published quarterly. Legislators who wish to receive them more often may contact the executive director.

Children and Family Services Dept.

Inspector General's report, FY 2011
Office of the Inspector General (OIG) investigates child deaths and serious injuries; investigates welfare system complaints; investigates and prosecutes licensure complaints; helps with criminal history checks; operates a complaint hotline; acts as ethics officer for DCFS; reviews and comments on proposed rule changes; and develops best-practices models for caseworkers and supervisors. In FY 2011 the OIG received 113 child death reports (the first increase since 2007); 18 were ruled homicides. The hotline received 1,165 calls, resulting in 97 investigations. Gives death and serious injury investigation summaries and recommendations, and DCFS responses. Also lists recommendations to DCFS for improvement; past years' recommendations and status; and summaries of employee discipline. (20 ILCS 505/35.5(h); Jan. 2012, 264 pp. + 1 appendix)

Corrections Dept.

Quarterly report, Oct. 1, 2011
On August 31, 2011, adult facilities had 49,066 residents (46% over rated capacity and 0.2% over the 48,978 projected using FY 2009 data). Population was projected to reach 49,615 by September 2012. Adult transition center population was 1,207 (127 over rated capacity). Average ratio of inmates to security staff was 6.1. Enrollment (unduplicated) in educational and vocational programs was 8,610. Nearly all inmates were double-celled

(67%) or multi-celled (25%), with about 34 square feet of actual living area each. No capital projects were being funded. (730 ILCS 5/3-5-3.1; Oct. 2011, 15 pp.)

Education, State Board of *Streamlining Illinois' Regional Offices of Education: Commission Recommendations, 2012*

Public Act 97-619 created an Offices of Education Commission and charged it with exploring and examining all duties of the State Board of Education, regional offices of education, and intermediate service centers to determine which should be handled regionally. Final recommendations are: adopt a statewide coordinating council; fund core services across the state; implement an accountability system for regional offices of education and intermediate service centers; and restructure sizes of regional offices of education. (105 ILCS 5/3A-18; April 2012, 94 pp.)

Government Forecasting & Accountability, Commission on *FY 2012 budget summary*

The FY 2012 operating budget totaled almost \$57.5 billion, down \$2.8 billion (4.6%) from FY 2011 appropriations. The Governor vetoed about \$380 million. Sources are 50% General Funds, 36% other state funds, and 14% federal funds. Major purposes served (by all funds) are human services (47%), education (28%), government services (10%), economic

development (9%), public safety and regulation (5%), and quality of life (1%). On May 31, 2011, G.O. bond authority for new projects was \$26.9 billion with \$8.1 billion unissued, and Build Illinois bond authorization was \$5.7 billion with \$1.8 billion unissued. Appropriations for the State Employees' Group Health Insurance Program were \$2.5 billion, down 24.5% from FY 2011; but DHFS liabilities were expected to rise 2.3% to \$2.4 billion. FY 2012 budget and related laws were enacted in 21 Public Acts. Also reports on SERS members by agency; pension-related laws; state-funded retirement systems; elementary and secondary education; Medicaid; and special fund transfers since 2003. (25 ILCS 155/3(12); Aug. 2011, 269 pp.)

Governor's capital infrastructure plan, FY 2013

Capital budget proposal for FY 2013 had \$5.013 billion in new and \$19.841 billion in reappropriations. The new appropriations were from bond funds (\$3.002 billion); various state revenue funds (\$1.835 billion); and federal or trust funds (\$176 million). No new appropriations were proposed from Transportation A, B, or D bond funds or the bond fund for coal and energy development. General Obligation Bond authorization for new projects (except Pension and Medicaid Funding bonds) was \$26.933 billion; \$7.334 billion was unissued as of January 31, 2012. Refunding bond limit was \$4.839 billion; \$2.152 billion was unissued. Debt service was projected at \$1.390 billion for general obligation bonds, \$586 million for pension obligation bonds, \$975 million for pension obligation notes, and \$339 million for state-issued revenue bonds. Describes capital projects recommended for new appropriations, modified revenue estimates for Capital Projects Fund,

(continued on p. 16)



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First Reading

A publication of the Legislative Research Unit

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Abstracts (continued from p. 15)

and current bond topics. (25 ILCS 155/3(8); April 2012, 78 pp. + 6 appendices)

Healthcare and Family Services Dept.

Medicaid program, FYs 2009-2011
Medicaid spent \$13.3 billion in FY 2011, serving about 2.7 million people per average month through 67,700 providers (39,218 physicians; 734 nursing facilities; 359 home health

agencies; and 258 hospitals). DHFS held a public meeting and Webinar to gauge community interest and capacity to provide alternative models for care delivery. DHFS implemented Integrated Care Program in May 2011 for older adults and adults with disabilities in the Collar Counties. Some 12,350 clients had enrolled by July 1, 2011. (305 ILCS 5/5-5 and 5/5-5.8; March 2012, 94 pp.)

Insurance Dept.

Public pension report, FYs 2009-10
At FY 2010 yearend, state and local pension funds had \$251.2 billion in total liabilities and \$136.3 billion in assets—an overall funded rate of 54.3%. In FY 2010 they paid \$10.4 billion to 334,752 retirees; \$709 million to 60,905 survivors; and \$270 million to 10,050 disabled beneficiaries. Funded ratios of the state-financed systems were: General Assembly 26.3%; State Employees 37.4%; State Universities 46.4%;

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Teachers 48.4%; and Judges 34.1%. Describes statutory changes and court cases affecting pension funds and systems; retirement requirements and benefits in each system; and funding and other financial data for each system. (40 ILCS 5/1A-108; undated, rec'd April 2012, 186 pp.)

Juvenile Justice Dept.

Quarterly report, January 1, 2012
On November 30, 2011 the state's juvenile facilities held 1,072 youth, below rated capacity of 1,754 and bedspace of 2,100. Number was projected to reach 1,194 by December 2012. Ratio of security staff to youth was 0.684. Most youth were single-celled (68%) or double-celled (29%), with about 105 square feet of living area each. Enrollment (unduplicated) in educational and vocational programs was 868. No capital projects were funded. (730 ILCS 5/3-5-3.1; Jan. 2012, 10 pp.)