

**State of Illinois**

Rod R. Blagojevich, Governor

**Department of Public Health**

Eric E. Whitaker, M.D., M.P.H., Director



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# **Illinois Stroke Task Force Annual Report to the General Assembly**

2006

**Annual Report to the General Assembly  
Public Act 92-0710**

**Illinois Stroke Task Force  
January 1, 2006 – December 31, 2006**

**Illinois Department of Public Health  
Office of Health Promotion  
Division of Chronic Disease Prevention and Control**

**Illinois Stroke Task Force  
Public Act 92-0710  
Annual Report**

**January 1, 2006 – December 31, 2006**

**Introduction**

This report serves as the annual report to Gov. Rod R. Blagojevich and the General Assembly pursuant to Public Act 92-0710, effective July 19, 2002. A Stroke Task Force was created in 2004 by the Illinois Department of Public Health. The task force is comprised of the following members: 19 members appointed by Dr. Eric E. Whitaker, state public health director, five members appointed by the governor; and four ex-officio members (selected House and Senate members). The director of public health serves as the chairperson of the task force. The task force is to adopt bylaws; meet at least three times each year and may establish committees as it deems necessary. The task force is to advise the Department of Public Health regarding priorities for improvements in stroke prevention and treatment efforts.

Stroke continues to be a growing concern and is the third leading cause of death in Illinois, accounting for 6,845 deaths in 2003. The age-adjusted death rate for cerebrovascular disease from 1999 – 2002 was 117.2 deaths per 100,000 Illinois population. On average, every 45 seconds, someone in the United States has a stroke. Many of the stroke survivors cannot perform daily tasks and one-fifth will require institutional care.

It is important to understand the risk factors associated with stroke: high blood pressure, cigarette smoking, excessive alcohol intake, increasing age, prior history of stroke or heart disease, diabetes, family history of stroke, and socioeconomic disadvantage. If an individual carries a specific risk, it is vital to take steps to reduce those risks. The risk of death and disability can be reduced if stroke victims receive prompt appropriate treatment.

Knowing the warning signs of a stroke is also very important. Warning signs include: sudden numbness or weakness of face, arm or leg, especially on one side of the body; sudden confusion, trouble speaking or understanding speech; sudden trouble seeing in one or both eyes; sudden trouble walking, dizziness, loss of balance or coordination; and sudden severe headache with no known cause. If any of these symptoms appear, 911 should be called immediately because treatment is more effective if it is given quickly and every minute counts.

**Progress** – During 2006, the Department convened Illinois Stroke Task Force meetings on March 10, July 14 and December 15. During 2005, the task force members worked to develop recommendations on the following priority areas: Primary Prevention/Public Education, EMS Notification and Response, Acute Care/Sub-Acute Care and Secondary Prevention, Rehabilitation, and Quality Improvements. Progress made during 2006 on each recommendation follows.

**Primary Prevention/Public Education:**

**Recommendation #1** Coordinate community education opportunities reaching multiple, high-risk populations with warning sign messages.

**Strategy a.** Facilitate the use of American Stroke Association (ASA) and National Stroke Association (NSA) initiatives.

Activities:

- Coordinated with NSA and developed a Public Health Stroke Summit held on December 6-8, 2006 in Chicago.
- Collaborate with the American Heart Association (AHA) on “Power to End Stroke.” (11/05-6/07)

Strategy b. Explore partnership opportunities with major league baseball/local minor leagues and/or other professional sports team, e.g. Bears, Blackhawks, Bulls, Cubs and White Sox.

Activities:

- The Chicago White Sox will be contacted in February 2007 regarding an event for May 2007 where promotional materials will be distributed at baseball games.

Strategy c. Conduct stroke awareness in May 2006, including items such as a governor’s proclamation.

Activities:

- Developed and worked with the governor’s office to develop proclamations for May’s promotion of stroke and high blood pressure.
- Developed and sent local health departments and hospitals materials and information for May’s promotion of stroke and high blood pressure (including fact sheets, burden information, newspaper articles, news release, governor’s proclamation and materials from ASA and NSA).
- A planning committee was established with NSA to hold the mock stroke event in Chicago in May 2007.

Strategy d. Conduct a stroke media campaign using public service announcements (PSAs), billboards or paid advertisements.

Activities: The following activities were not accomplished.

- Seek funds to support a media campaign.
- Utilize Chicago Access Network (CAN) Television.

**Recommendation #2** Assure that the state heart disease and stroke plan includes public education for stroke.

Strategy a. Work with Department staff as the state plan is finalized.

Activities:

- The state plan is in the process of being finalized in February 2007

**EMS Notification and Response:**

**Recommendation #1** Develop and conduct an assessment of the emergency medical systems’ (EMS) stroke capacity and stroke specific quality improvement activities in collaboration with the Department’s Division of EMS and Highway Safety.

Strategy a. Distribute assessment tool to the 11 medical directors for each EMS region by March 30, 2006.

Activities:

- An on-line EMS inventory assessment tool was distributed to the 11 medical directors for each EMS region in July 2006.

Strategy b. Analyze results of assessment by June 30, 2006.

Activities:

- EMS inventory was analyzed and results were shared at the Great Lakes Regional Stroke Network Data Exchange on November 29, 2006 and at the Illinois Stroke Task Force meeting on December 15, 2006. The majority of EMS (75.5%) do not conduct continuous quality improvement practices for stroke patients. Only 27 percent use computer to complete pre-hospital report form. These areas require opportunities for improvement.

**Recommendation #2** Develop a statewide EMS protocol (Standing Medical Order) that includes the use of a stroke scale and coordinate the adoption of its use through legislation or regulation.

Strategy a. Initiate conversations with the chair of the EMS Advisory Council to notify of assessment being conducted on EMS stroke capacity and stroke specific quality improvement activities.

Activities: Information was shared with the Medical Advisor, Office of Health Care Regulation, Illinois Department of Public Health.

Strategy b. Meet with EMS Advisory Council chair to share results from assessment and discuss proposed language for universal Standing Medical Order, if necessary.

Activities: No meeting was held.

**Recommendation #3** Promote appropriate training (continuing education) for pre-hospital professionals (including emergency medical technicians, dispatchers and first responders).

Strategy a. Identify future training conferences or opportunities reaching pre-hospital providers.

Activities: There was no activity.

Strategy b. Promote the use of the Online Rapid Response to Stroke to dispatch and EMS professionals. [www.aheconnect.com](http://www.aheconnect.com)

Activities: There was no activity.

**Recommendation #4** Coordinate support and policy changes for statewide transport protocols for emergency medical, including pre-arrival instructions provided by all emergency medical directors (EMD).

Strategy a. Review state law and requirements (EMDs must be certified in Illinois, however, there is no enforcement).

Activities: There was no activity.

**Recommendation #5** Coordinate policy changes for statewide coverage of 911 and E911.

Strategy a. Initiate discussions with the Illinois Commerce Commission on expanding access to 911 and enhanced 911, where necessary by June 30, 2006.

Activities: There was no activity.

## **Acute Care/Sub-Acute Care & Secondary Prevention:**

**Recommendation #1** Conduct a hospital assessment to measure the capacity and limitations for treating acute stroke, the approach to sub-acute care and current stroke quality improvement activities.

Strategy a. Use samples of assessments conducted within the U.S. Centers for Disease Control & Prevention Stroke Hospital Registry, Mississippi and Georgia to develop assessment which will be distributed to all Illinois hospitals during the spring of 2006.

Activities:

- An on-line hospital inventory survey tool was deployed to all Illinois hospitals (more than\* 200) on December 4, 2006. A total of 74 (36.6%) hospitals responded to the survey. Results are currently being analyzed. Information will be shared with the Stroke Task Force members as well as for the federal grant application.

**Recommendation #2** Coordinate the promotion of hospital-based quality improvement initiatives and adoption of quality indicators through resources such as AHA's Get with the Guidelines –Stroke, Illinois CAPTURE (CAre and Prevention Treatment Utilization REgistry) Stroke Registry.

Strategy a. Include information on the Department's Web site for heart disease and stroke in the Professional Education section.

Activities:

- Information has been added to the Web site.

Strategy b. Collaborate with AHA and NSA to provide a nursing symposium as a pre-conference during the Public Health Stroke Summit in December 2006 in Chicago.

Activities:

- A nursing symposium as a pre-conference was provided during the Public Health Stroke Summit on December 5-7, 2006 in Chicago.

Strategy c. Promote utilization of Resources for Heart Disease and Stroke Quality Improvement created by the Great Lakes Regional Stroke Network.

Activities: There was no activity.

**Recommendation #3** Coordinate support and policy change for the use of telemedicine to address stroke needs in the rural areas.

Strategy a. Initiate discussions with the Illinois Rural Health Association and Lt. Governor Pat Quinn to develop a business case on the cost/benefit of telemedicine to promote to hospital administrators.

Activities: Potential funding sources are being explored.

Strategy b. Investigate funding options to support the 52 Illinois Critical Access hospitals in need of equipment for telemedicine capability.

Activities: There was no activity.

**Recommendation #4** Coordinate the promotion of the Joint Commission on Accreditation of Healthcare Organizations, Primary Stroke Center certification program to all hospitals.

Strategy a. Include information on the Department's Web site for heart disease and stroke in the Professional Education section.

Activities:

- Information is on the Department's Website ([www.idph.state.il.us/heartstroke](http://www.idph.state.il.us/heartstroke)).

Strategy b. Collaborate with AHA and NSA to provide a nursing symposium as a pre-conference during the Public Health Stroke Summit in December 2006 in Chicago.

Activities:

- National Stroke Association's 2006 Regional Nurses Stroke Team met with the Great Lakes Regional Stroke Network on December 5-7, 2006 in Chicago.

Strategy c. Collaborate with AHA to promote a workshop in March 2006.

Activities: There was no activity.

Strategy d. Initiate discussions on the creation of a policy for diversion to primary stroke center.

Activities:

- At the December 15, 2006 meeting, a Task Force member presented on the needs in Illinois to have a successful implementation of stroke centers. A subcommittee was formed to explore the possibility of drafting legislation. Currently, Illinois is behind in establishing certified primary stroke centers. Other states, such as Massachusetts, New York and Florida, have required their hospitals be certified stroke centers. In Illinois, there are 17 certified primary stroke centers (only one downstate) compared to 64 in Florida.

**Recommendation #5** Coordinate appropriate stroke professional education opportunities to targeted health care professionals include emergency department physicians and nurses, neurologists, nurses, medical students and physicians.

Strategy a. Collaborate with quality improvement organizations on training initiatives, such as smoking cessation training.

Activities:

- Initiated discussions with the Foundation for Quality Healthcare, American Society of Hypertension and the AHA and NSA for the Public Health Stroke Summit in December 2006 in Chicago.

## **Rehabilitation**

**Recommendation #1** Review the Illinois Department of Healthcare and Family Services' Guidelines for Rehabilitation on providing post-stroke care and rehabilitation services, mild neurological impairment, disability time frame and access to acute rehabilitation services. There was no activity to accomplish this recommendation.

Activities:

- There was no activity.

**Recommendation #2** Conduct an assessment of rehabilitation facilities to determine the current level of rehabilitation services for persons who have had a stroke and the resources that were provided. Identify stroke quality improvement activities.

Strategy a. Initiate discussion with task force members about information to be included in assessment.

Activities: There was no activity.

**Recommendation #3** Promote communication among rehabilitation specialists and manage care organizations to better coordinate patient care.

Strategy a. Coordinate panel discussion at Public Health Stroke Summit in December 2006 in Chicago.

Activities: There was no activity.

Strategy b. Coordinate policy change for increased length of rehabilitation services provided by both public and private insurers.

Activities:

- Developed a half-day roundtable discussion with the AHA, Midwest Affiliate.

Strategy c. Pilot test a patient worksheet to help better navigate their rehabilitation health insurance benefits.

Activities: There was no activity.

**Recommendation #4** Coordinate professional education opportunities specific for rehabilitation healthcare providers.

Strategy a. Promote resources from reputable state and national organizations to providers.

Activities:

- Resources include Starting Now, Stroke Connection, Peer Visitor Program, Toll-free Warm Line and Web, Stroke Group Registry. Also, at the Great Lakes Regional Stroke Network (GLRSN) Web site, there are patient education fact sheets as well as professional education links.
- Included information on the Department's Web site for heart disease and stroke in the Professional Education section.

**Recommendation #5** Promote, through partners, a statewide stroke rehabilitation resource and information guide.

Strategy a. Finalize the guide by March 2006.

Activities:

- The Stroke Rehabilitation Resource and Information Guide was published and distributed to registry hospitals with a reference to the Department's Web page for further printing option.

Strategy b. Initiate discussions with the Illinois Department of Human Services, Rehabilitation Services.

Activities: There was no activity.

## **Quality Improvement**

**Recommendation #1** Facilitate system level changes and collaborative efforts to improve stroke care, including public education, EMS notification and response; acute care; sub-acute care; and secondary prevention and rehabilitation.



## **Illinois Stroke Projects Funded by the U.S. Centers for Disease Control and Prevention (CDC)**

In July 2004, the Department received grants from CDC for nearly \$1.5 million to prevent and control heart disease and stroke and to establish a stroke network in the six-state Great Lakes Region. This funding is being used on initiatives designed to reduce the burden of heart disease and stroke and improve the quality of life for Illinois' citizens.

The Department is focusing on stroke prevention through the implementation of two projects: the Great Lakes Regional Stroke Network and the Paul Coverdell Stroke Registry.

The purpose of the Great Lakes Regional Stroke Network is to increase stroke awareness and enhance the role of public health in addressing stroke prevention and quality of care. The network includes public health and medical professionals, policy makers and community health advocates. The purpose of the Paul Coverdell Stroke Registry is to measure the quality of care for acute stroke patients and implement improvement strategies focusing on policy, systems change and professional education.

### **Great Lakes Regional Stroke Network**

In its first year of funding, the Great Lakes Regional Stroke Network focused on developing its structure and action plans, completing an inventory of states' stroke education activities; implementing communication channels such as a Web site and listserv; and creating a policies and procedures manual. Second year activities have built on this foundation. Work groups developed recommendations for the individual state stroke task forces to implement. Those recommendations follow:

#### **Quality Improvement**

Facilitate systems level changes and collaborative efforts to improve acute stroke care and rehabilitation.

- Conduct an assessment of the state's emergency medical systems (EMS) stroke capacity in collaboration with the Department's Division of EMS and Highway Safety.
- Develop or improve statewide EMS protocols that include the use of a stroke scale.
- Promote appropriate training for dispatchers and first responders.
- Conduct a stroke training module at the state EMS conference.
- Collaborate with quality improvement organizations on training initiatives, such as smoking cessation training.
- Promote communication among rehabilitation specialists and managed care organizations to better coordinate patient care.
- Invite rehabilitation specialists and managed care organizations to participate in the state stroke task force.
- Share successful stroke protocols (hospital and EMS) and standing orders with the network.

## **Public Education**

Promote awareness of the warning signs of stroke and the need to call 911.

- Explore and implement strategies to reach multiple, high-risk populations with warning sign messages.
- Explore partnership opportunities with major league baseball/local minor league teams, or other professional sports teams.
- Conduct a stroke awareness day in May, and include events/items such as a Governor's proclamation.
- Conduct a stroke media campaign using public service announcements or paid advertisements.
- Partner with the Department's Office of Preparedness and Response to begin discussions to expand access to 911 and enhanced 911, where necessary.

## **Epidemiology and Surveillance**

Build and utilize epidemiologic capacity to improve stroke prevention and control efforts.

- Identify and prioritize research and evaluation funding needs.

The Department's Heart Disease and Stroke Prevention Program implemented one of these recommendations when it partnered with the Illinois Chapter of the National Emergency Number Association in October 2005, at their annual conference to provide stroke education to dispatch personnel throughout the state.

In addition to this guidance, a burden document consisting of the state of stroke within the Great Lakes Region was developed. Individual state stroke surveillance fact sheets were developed in March 2006. This burden document is housed at the Network's Web site: <http://glrsn.uic.edu>. The Network also created a strategic map to outline the future direction of the Network. An online communication survey was recently conducted with the members of the Network listserv. With a 38 percent response rate, it was learned that 79 percent found the listserv to be very useful. Other ways about improving communication were learned.

The Network has been successful in submitting poster presentations for conferences. In 2005, the Stroke Belt Consortium accepted a poster presentation entitled, "Forming a Stroke Network: The Great Lakes Regional Stroke Network Experience." The International Stroke Conference 2006 also accepted an abstract by the Network. In 2006, the Program Manager of the Network has been asked to present at two additional conferences - National Stroke Association's Stroke Public Health Summit and the CDC's 2006 Health Promotion Conference. The Quality Improvement Work Group of the Network conducted 3 quality improvement calls on JCAHO Stroke Center Recertification, Emergency Department in Stroke Care and NIH Stroke Scale. Each call had over 100 healthcare professionals from across the Great Lakes region in attendance. Through partnerships with the National Stroke Association, a stroke team meeting was held in Chicago in December with over 250 healthcare professionals in attendance as was an EMS Stroke training in Chicago and a Public Health Summit. A regional stroke atlas of mortality rates was started.

### **Illinois CAPTURE Stroke Registry**

Illinois CAPTURE (CAre and Prevention Treatment Utilization REgistry) Stroke Registry is a collaborative effort between the Department and the University of Illinois at Chicago through a partnership with a random sample of acute care hospitals in Illinois.

The mission of this collaborative effort is to improve the care delivered to acute stroke patients in Illinois hospitals. Improved documentation of the items critical to the delivery of stroke care is also a focus of this effort. The members of the Illinois CAPTURE Stroke Registry Team work with participating hospitals to improve the care delivered to acute stroke patients and help standardize the processes of care for acute stroke patients. Each hospital is assisted in achieving this mission as well as their specific hospital goal(s) for stroke care.

Hospital selection began in 2004. Twenty-two acute care hospitals were chosen using a stratified random sample. Each of the seven Department regions in Illinois (Champaign, Chicago, Edwardsville, Marion, Peoria, Rockford and West Chicago) are represented in the registry as are small, medium and large hospitals.

In the second year of the project, 20 additional hospitals located in all seven regions were selected for participation. In the third year, another 6 hospitals were selected, for a project total of 46 participating hospitals.

As of December 31, 2006, there have been 7,307 cases entered into the stroke registry's on-line data collection tool.

### **Funds Spent for Illinois Stroke Task Force Activities**

There were no state dollars spent on activities related to the Illinois Stroke Task Force.