

## Ohio



## Stroke Victims Benefit from Improved Emergency Medical Services

**“Treatments received after a stroke can save lives if the victim receives immediate help from well-trained EMS providers.”**

*—Carol Cunningham, MD, State Medical Director,  
Ohio Department of Public Safety, Division of EMS*

### Public Health Problem

Stroke is a leading cause of death and significant disability, including paralysis, speech difficulties, and emotional problems, in the United States. Fortunately, many people can survive or recover with fewer disabilities if they get medical care soon after symptoms begin. Studies have shown that patients who come to a hospital emergency department (ED) by ambulance get treated faster.

Because more than half of all U.S. stroke patients arrive at the ED by ambulance, emergency medical services (EMS) providers can play a key role in helping people survive a stroke. In Allen County, Ohio, Dr. Valerie Lint worked for several years in the Lima Memorial Health System as assistant medical director, EMS director, and an ED physician, and her experiences motivated her to want to help. She saw that it was important to make sure that local EMS providers know how to identify stroke victims, make quick and accurate decisions about how to care for them, and get them to the hospital quickly.

Today, Dr. Lint is the director of EMS Curriculum at the University of Toledo College of Medicine and serves on the Regional Physicians Advisory Board. Thanks to her continued efforts, Allen County now offers ongoing education for both ED staff working in area hospitals and EMS providers working in the field. This training could help save lives and improve health outcomes for

Allen County residents, many of whom have two or more risk factors for stroke, including high blood pressure, physical inactivity, obesity, cigarette smoking, and diabetes.

### Taking Action

The Allen County Health Department joined forces with Lima Memorial Health System to start a comprehensive training program to improve the standard of acute stroke care provided by EMS and ED staff. In 2008 and 2009, with help from CDC's Preventive Health and Health Services (PHHS) Block Grant, the following steps were taken:

- The health department formed a partnership with the Ohio chapter of the American Heart Association to offer a train-the-trainer course for Advanced Stroke Life Support (ASLS). The nationally recognized ASLS curriculum was developed by stroke care experts at the University of Miami (Florida) and meets the Joint Commission on Accreditation of Hospital Organizations' stroke center criteria.
- Dr. Lint became a certified ASLS trainer and encouraged the Allen County Health Department to offer quarterly training sessions to EMS and ED professionals. An ASLS-certified health educator provided a condensed version of the course to small medical facilities in the county.

**Healthy People 2010 Objective**  
Coronary heart disease

**PHHS Block Grant Funding**  
Represents 100% of total program costs



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For more information on the  
PHHS Block Grant, go to  
[www.cdc.gov/phhsblockgrant](http://www.cdc.gov/phhsblockgrant)

For more information on  
Healthy People, go to  
[www.healthypeople.gov](http://www.healthypeople.gov)



### Taking Action (continued)

- The ASLS course teaches EMS providers how to identify stroke symptoms, use treatment guidelines for the best possible care, and get patients to the closest stroke center as fast as possible.

### Impact

After the ASLS initiative began, the EMS and hospital communities joined forces, working to improve health outcomes for stroke patients. Thanks to the PHHS Block Grant and support from the Ohio chapter of the American Heart Association, the Allen County Health Department made significant progress in raising stroke care standards during 2008–2010. For example,

- Ninety-three EMS and ED staff completed the full 8-hour ASLS training, and 302 people received some ASLS training.
- Thirteen EDs and two area hospitals, Lima Memorial Health System and St. Rita's Medical Center, now use

the new acute stroke care protocols. These protocols include identification of acute stroke signs and symptoms, rapid transport, and early treatment.

- ASLS training continues in a variety of formats, including a self-study course, a paramedic training program at Rhodes State College in Lima, and the 8-hour ASLS class, which is taught annually.
- The health department provides ongoing community education and outreach events to county residents.
- The Physician Advisory Board for Region III in Ohio has adopted and approved the new ASLS acute stroke care standards, and the two hospitals have begun a 5-year plan to become primary stroke centers as designated by the Joint Commission on Accreditation of Hospital Organizations.

### PHHS Block Grant Supports Ohio's Healthy People 2011 Priorities

The PHHS Block Grant provides flexible funding that states can use to prevent and control chronic diseases, respond quickly to outbreaks of infections and waterborne diseases, and address their specific public health needs. States can align their programs with health objectives from *Healthy People 2010*.

Ohio uses its funds to address six health objective priorities, including

- Culturally appropriate community health promotion programs.
- Deaths from unintentional injuries.
- Public health access to information and surveillance data.
- Rape or attempted rape.
- Health improvement plans.

For a complete list of funded health objectives, go to to  
[www.cdc.gov/phhsblockgrant/hp2010.htm](http://www.cdc.gov/phhsblockgrant/hp2010.htm)