Monitoring Traumatic Brain Injuries

WHAT IS THE PUBLIC HEALTH PROBLEM?
At least 5.3 million Americans live with disabilities resulting from traumatic brain injuries (TBIs). Each year, about 1.5 million Americans sustain a TBI. Of those, approximately 1.1 million, or 75 percent, sustain a mild traumatic brain injury (MTBI). As a result of these injuries, each year:
- 50,000 Americans die.
- Over 80,000 Americans experience the onset of long-term or lifelong disability.
- More than 1,000,000 Americans get emergency care for TBI.
- An estimated $56 billion in direct and indirect costs is spent.

WHAT HAS CDC ACCOMPLISHED?
CDC’s Traumatic Brain Injury program provides leadership in the study of traumatic brain and spinal cord injuries. The Traumatic Brain Injury Act of 1996 charged CDC with creating a system to monitor TBI. CDC funds 12 state health departments to determine the number of persons who die or seek hospital care due to TBI and to document TBI-related disabilities. States use these data to develop programs to prevent TBI, to educate the public about TBI, and to identify the need for services for persons with TBI. CDC is also exploring the impact of TBI in mass trauma events by funding a study to identify possible TBI among the hospitalized survivors of the World Trade Center attacks.

In the Child Health Act of 2000 Congress asked CDC to report the rate of occurrence of MTBI in the United States. CDC convened an expert panel, the Mild Traumatic Brain Injury Work Group, which recommended appropriate and feasible methods to measure the magnitude of the problem of MTBI in this country.

CDC has also developed a new physician tool kit to improve clinical diagnosis and management of MTBI. Heads Up: Brain Injury in Your Practice contains practical, easy-to-use clinical information, patient information in English and Spanish, scientific literature, and a CD-ROM. The kit is available free of charge on the CDC website at: http://www.cdc.gov/ncipc/pub_res/tbi_toolkit/toolkit.htm.

Example of program in action: With funding from CDC, the Colorado Department of Public Health and Environment conducted a study to determine the effectiveness of linking people with TBI to a 1-800 number for TBI services. Letters about the hotline were sent to a random sample of persons with TBI who were identified from a CDC-funded TBI surveillance system. As a result of the letters, the number of calls to the hotline increased four fold. Because of the success of this small project, Colorado has extended the program to more persons with TBI.

WHAT ARE THE NEXT STEPS?
TBI is a major public health problem, placing a significant burden on not only the injured individual, but on family members and society as well. CDC will continue its monitoring and prevention efforts. In addition, CDC, together with support from the Social Security Administration, is funding the South Carolina TBI Follow-up System to study employment of persons with TBI and the associated disability-related costs.