

## MONITORING TRAUMATIC BRAIN INJURIES

### WHAT IS THE PUBLIC HEALTH ISSUE?

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 injuries, about 1.1 million (75%) are concussions or other forms of mild traumatic brain injuries (MTBIs). Though labeled “mild,” brain injuries of this type can cause long-term or permanent impairments and disabilities. As a result of all types of TBIs, each year:

- 50,000 Americans die.
- More than 80,000 Americans experience the onset of long-term or lifelong disability.
- More than 1 million Americans get emergency care for TBIs.
- An estimated \$56 billion in direct and indirect costs is spent.

### WHAT HAS CDC ACCOMPLISHED?

CDC is a leader in the study of TBI. Under the *Children’s Health Act of 2000*, CDC is creating a system to monitor TBIs. CDC has funded more than 15 state health departments to determine the number of persons who seek care in the emergency department, seek other hospital care, sustain TBI-related disabilities, or die due to TBIs. States use these data to develop programs to prevent TBIs, educate the public about TBIs, and identify the need for services for persons with TBIs. CDC is also exploring the impact of TBIs in mass-trauma events by funding a study to identify possible TBIs among hospitalized survivors of the World Trade Center attacks.

In 2003, CDC published a report to Congress on the rate of occurrence of MTBIs among the U.S. population. 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. The *Report to Congress on Mild Traumatic Brain Injury in the United States: Steps to Prevent a Serious Public Health Problem* presents the findings and recommendations of the work group (see [www.cdc.gov/ncipc/pub-res/mtbi/report.htm](http://www.cdc.gov/ncipc/pub-res/mtbi/report.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 helpline were sent to a random sample of persons with TBIs who were identified from a CDC-funded TBI surveillance system. As a result of the letters, the number of calls to the helpline increased four-fold. Because of the success of this small project, Colorado has since received funding from the Health Resources and Services Administration to extend the program to more persons with TBIs.

### WHAT ARE THE NEXT STEPS?

TBI is a major public health problem, affecting not only injured individuals, but also their family members and society. CDC will continue its efforts to monitor and prevent TBIs. CDC has funded the University of Maryland, Baltimore County, to evaluate the effectiveness of the Florida TBI registry. This information will help other states interested in developing their own registries. In addition, CDC is developing a tool kit to raise awareness among high school coaches, athletes, parents, and school officials about sports-related concussion and the need to prevent and manage concussions.