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TRAUMATIC BRAIN INJURY IN THE UNITED STATES: NATIONAL ESTIMATES OF PREVALENCE AND INCIDENCE, 2002–2006

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10.1136/ip.2010.029215.951

Introduction Traumatic Brain Injury (TBI) is an important public health problem in the United States (US) resulting in disabling conditions and long-term societal costs. Thus, there is a compelling need for prevention, treatment and rehabilitation initiatives informed by national, population-based data.

Objective To estimate the prevalence and incidence of TBI in the US utilizing several nationally representative data sets.

Methods To produce national estimates, we averaged and analysed data from 2002–2006 for TBI-related visits to hospital-based emergency departments (EDs), hospitalisations, and deaths from the National Hospital Ambulatory Medical Care Survey, the National Hospital Discharge Survey, and the National Vital Statistics System, respectively.

Results For 2002–2006, the estimated average annual incidence of TBI was 1.7 million, including 52 000 deaths, 275 000 hospitalisations, and 1 365 000 ED visits. For all age groups, the leading external causes were as follows: falls (35.2%); motor vehicle traffic (17.3%); struck by/against events (16.5%); assaults (10%). Rates were higher for males than females in all age groups. Falls produced the greatest number of TBI-related ED visits, (523 043) and hospitalizations (62 334). Motor vehicle traffic was the leading cause of TBI death, with rates highest among those 20–24 years. Children 0–4 years, adolescents 15–19 years, and adults >65 years were most likely to sustain a TBI and adults >75 years had the highest rate for hospitalisation and death. Annually, almost half a million TBI-related ED visits, 473 947, were made by children aged 0–4 years. TBI was a contributing factor to one third of all injury related deaths in the US.