



TRAUMATIC BRAIN INJURY HOSPITALIZATION INDICATOR 1

Proposed TBI Case Definition Diagnosis Codes*--Nonfatal Hospitalizations

Numerator:

- Nonfatal hospitalizations from the injury hospital discharge subset with any of the following ICD-10-CM diagnosis codes in any field.

Diagnosis Codes* for the Proposed TBI Case Definition

S02.0, S02.1	Fracture of skull
S02.8, S02.91	Fracture of other specified skull and facial bones; unspecified fracture
S04.02, S04.03, S04.04	Injury of optic chiasm; injury of optic tract and pathways; injuries of visual cortex
S06	Intracranial injury
S07.1	Crushing injury of skull
T74.4	Shaken infant syndrome

*7th character of A, B, or missing (reflects initial encounter, active treatment)

Denominator:

- Midyear population for the calendar year under surveillance obtained from the U.S. Census Bureau or suitable alternative.

Measures of frequency:

- Annual number of hospitalizations, by age group and sex.
- Annual age-adjusted rates, overall and by sex, standardized by the direct method to the year 2000 standard U.S. population.^{2,11}

Period for case definition:

- Calendar year based on date of hospital discharge.

Indicator notes:

- The Injury Surveillance Indicator for use with hospitalization data are restricted to cases where the principal diagnosis is injury. An analysis of 2016 Health Care Utilization Project (HCUP) National Inpatient Sample (NIS) data identified that of nonfatal hospitalizations with a TBI code anywhere in the record, 9% did not have an injury diagnosis in the principal diagnosis field. Studies focused specifically on TBI may want to explore these additional cases.
- The proposed case definition for TBI doesn't include S09.90 (unspecified injury of head). This is being tracked separately for potential future inclusion.

Limitations of data source:

- Injuries that result in hospitalization only represent a portion of the overall burden of injury. These injuries should be considered in the context of both less- and more-severe injuries.
- The accuracy of indicators based on codes found in hospital discharge data are limited by the completeness and quality of coding.