



## **TRAUMATIC BRAIN INJURY HOSPITALIZATION INDICATOR 2**

### **TBI: Nonfatal Hospitalizations with S09.90 but None of the Codes in the Proposed TBI Case Definition**

#### **Numerator:**

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

#### Diagnosis Code\* for Unspecified Head Injury

S09.90	Unspecified injury of head
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- \*7th character of A 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.<sup>2,11</sup>

#### **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 S09.90 code anywhere in the record, 63% did not have an injury diagnosis in the principal diagnosis field. Studies focused specifically on S09.90 may want to explore these additional cases.
- S09.90 is being considered for future inclusion in the TBI case definition.

#### **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.