Working with injury data

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

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Introduction

- Overview of *Working with Injury Data* session

- Injury-related NCHS publications

- Injury Data and Resources website

Session Overview

Comparisons of injury estimates from a population-based survey and provider based surveys

Li Hui Chen MS PhD, Office of Analysis and Epidemiology, NCHS

Comparing state and national injury statistics: Examples from Colorado

Holly Hedegaard MD MSPH, Colorado Department of Public Health and Environment

International injury comparisons using ICE developed injury indicators

Margaret Warner PhD, Office of Analysis and Epidemiology, NCHS

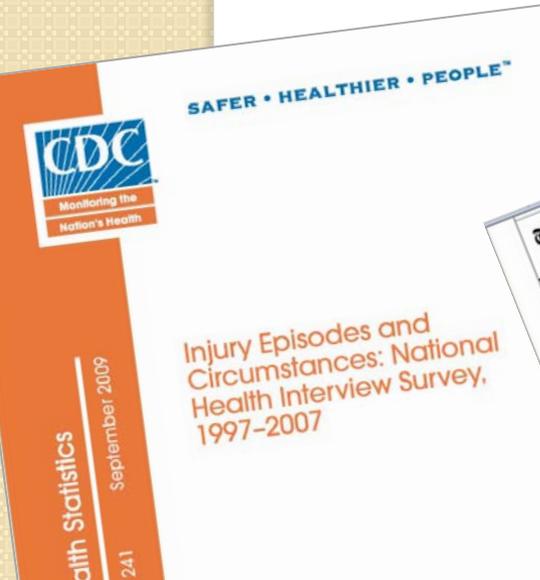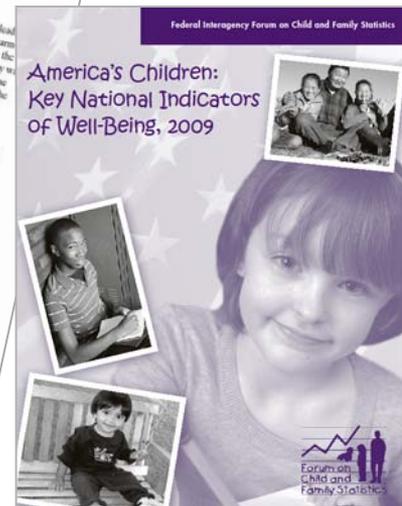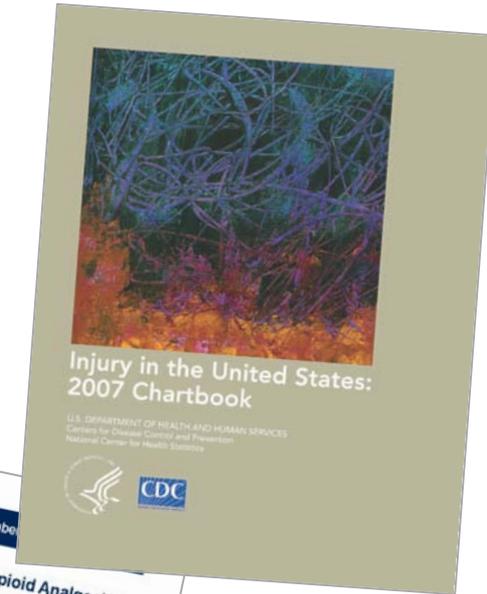*Utilizing severity to interpret changing trends of hospitalized injury rates*

Claudia A. Steiner MD, MPH, AHRQ

Identifying Accidental Passenger Vehicle Non-transport Incidents in the NVSS

Seymour D. Stern, National Center for Statistics and Analysis, NHTSA

Injury-related NCHS publications

- Annual NCHS publications
- Special reports
- NCHS Data Brief
- Series reports
- Fact sheets

On the web

- On-line tools to access NCHS injury data

- Injury Data and Resources Website
  - NCHS Databases
  - ICE on Injury Statistics
  - Tools and Frameworks
  - Data Access and Resources

Centers for Disease Control and Prevention
Your Online Source for Credible Health Information

http://www.CDC.gov/NCHS/injury.htm

Injury Data and Resources

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- NCHS Databases
- ICE on Injury Statistics
- Tools and Frameworks
- Data Access and Resources
- Presentations
- Publications

Related Sites

- CDC Injury and Violence
- National Center for Injury Prevention and Control
- National Institute for Occupational Safety and Health
- National Highway Traffic Safety Administration
- U.S. Consumer Product Safety Commission

NCHS Home

The purpose of this Web site is to provide an overview of injury morbidity and mortality data and statistics available from the National Center for Health Statistics (NCHS) and to provide details on injury surveillance methodology and tools to assist in data analysis.

- **NCHS Databases**
  Resources for injury data from various NCHS surveys and data collection systems

- **International Collaborative Effort on Injury Statistics**
  Learn about the mission and current activities of ICE

- **Tools and Frameworks**
  Tools for classifying International Classification of Disease (ICD) Codes

- **Data Access and Resources**
  Related resources in injury data

What's New

- Multiple cause of death 1999-2004, 2005-2006 now in WONDER (2/2010)

- QuickStats: Percentage of Injuries that Resulted in Time Lost from Work or School --- National Health Interview Survey, United States, 2004—2007 (2/2010)

- QuickStats: Annual Rate of Injury Episodes for Leading Causes of Injury, by Sex --- National Health Interview Survey, United States, 2004—2007 (2/2010)

- QuickStats: Percentage Distribution of Injuries, by Place of Occurrence, Among Males and Females --- National Health Interview Survey, United States, 2004—2007 (2/2010)

- Recommended actions to improve external-cause-of-injury coding in state-based hospital discharge and emergency department data systems (12/2009)

- Increase in Fatal Poisonings Involving Opioid Analgesics in the United States, 1999-2006 (9/2009)

- Injury Episodes and Circumstances: National Health Interview Survey, 1997-2007 [PDF - 776 KB] (9/2009)

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Injury Data

Contact Us:

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Similar pages for …
- National Hospital Discharge Surve[y]
- National Hospital Ambulatory Me[dical] Care Survey
- National Health Interview Survey

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NCHS Databases

▶**Mortality Data**

Hospital Inpatient Discharge Data

Emergency Department Visit Data

Health Interview Data

Health and Nutrition Examination Data

ICE on Injury Statistics

Tools and Frameworks

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NCHS Home > Injury Data and Resources > NCHS Databases

Mortality Data

Data Source

- Mortality Data from the National Vital Statistics System

Mortality Data - Injury Summary

Causes of death are coded according to ICD-10. Injury can be described in two ways using ICD-10: (1) external cause of injury and (2) the nature of the injury. External cause codes describe the mechanism or cause of the injury (e.g., motor vehicle crash) and the manner or intent of the injury (e.g., unintentional). The nature of injury codes describe the body region or site of the injury (e.g., hip) and the diagnosis (e.g., fracture).

For more information see: ICD Injury Matrices

Publications

- Mortality Data Publications

Presentations

- Mortality Data Presentations

Related Sites

CDC Injury and Violence

National Center for Injury Prevention and Control

National Institute for Occupational Safety and Health

National Highway Traffic Safety Administration

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Tools and Frameworks

Tools for Classifying ICD Codes

Overview of the ICD Injury Matrices

External Cause-of-Injury (E-code) Matrices

On this Page

- Tools for Classifying ICD Codes
- Classifications
- Programs and Statements for Injury Data Analysis

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Related Sites

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ICD-10
- Codes for the Matrix: [PDF - 36 KB] [XLS - 37 KB]
- SAS Input Statements [SAS - 5 KB]

ICD-9
- Codes for the Matrix: [PDF - 41 KB] [XLS - 28 KB]
- SAS Input Statements [SAS - 7 KB]

ICD-9 modified to be consistent with ICD-10 External Cause of Injury
- Codes for the Matrix: [PDF - 57 KB] [XLS - 34 KB]
- SAS Input Statements [SAS - 11 KB]

ICD-9-CM (Matrix updated and maintained by NCIPC)

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ICD Injury Matrices

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On this Page

- What are the matrices?
- Why are there so many matrices?
- Which ICD revisions, clinical modifications, and injury codes have matrices available?
- What are External Cause of Injury codes?
- What are the injury diagnosis codes?
- What are External cause of injury matrices?

- How to map ICD–9 To ICD–10 for external causes
- What is the Barell Matrix (ICD–9–CM)?
- What is the Injury Mortality Diagnosis (IMD) Matrix (ICD–10)?
- Suggested citations for the matrices
- Other references for the matrices
- ICD codes for matrices and SAS statements

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What are the matrices?

The ICD Injury matrices are frameworks designed to organize ICD coded injury data into meaningful groupings. The matrices were developed specifically to facilitate national and international comparability in the presentation of injury statistics.

Why are there so many matrices?

Injuries can be described in the ICD in two ways; either (1) as "external cause" which describes the cause and intent in a single code or (2) as the "nature of injury" which describes the body and nature of injury in a single code. There are multiple revisions of the ICD. There are also clinical modifications which are more detailed for use with morbidity data. There is also a mapping between the revisions of the ICD.

ICD Injury matrices

- External cause matrix categorizes ICD codes by cause & intent.

- Nature of injury matrix categorizes ICD codes by nature & body region.

ICD Revisions & modifications	External cause of injury	Nature of injury
ICD–9	✓ Matrix	
ICD–9–CM	✓ Matrix	✓ Barell Matrix
ICD–10	✓ Matrix	✓ Injury Mortality Diagnosis Matrix

- For codes and SAS programs see
  http://www.cdc.gov/nchs/injury/injury_tools.htm

For more information, see:
www.cdc.gov/nchs/injury.htm