## **Background Information**

- 1. Traumatic brain injuries (TBI) can be categorized into six causes:
  - Motor Vehicle Crashes
  - Unintentional Falls
  - Unintentionally struck by or against an object
  - Other unintentional injury, mechanism unspecified
  - Assault
  - Other or no mechanism specified
- 2. TBIs can have have three outcomes:
  - Emergency department visits
  - Hospitalizations
  - Deaths
- 3. Any outcome of TBI can be as a result of any cause. Similarly, any cause can result in any of the outcomes.
- 4. Each occurrence of TBI can be classified by age groups.
- 5. Each occurrence of TBI can be classified by year.

## Data cleaning

- age\_table has missing values on number and rates for intentional self injuries. Deliberate on leaving this cause out of the analysis.
- Removing the 14 May entries
- Removing the totals from age\_group column
- reassigning values for mechanisms and causes for easy manipulation with sql
  - emergency department visits = 200, hosp.= 201, deaths = 202
  - motor vehicle crashes = 100, unintentional falls = 101.... etc

## Revised insights

## Main problem

- What is the burden of tbi in the US?
  - age distribution of tbi ie most affected groups
  - leading causes of tbi
    - ullet in terms of age group
    - in terms of year
  - which causes result in most
    - 1. EDV
    - 2. hospitalizations
    - 3. deaths
  - trends of tbi (numbers and rates) from 2006 to 2014 in terms of
    - 1. outcomes
    - 2. mechanisms

..... and so on