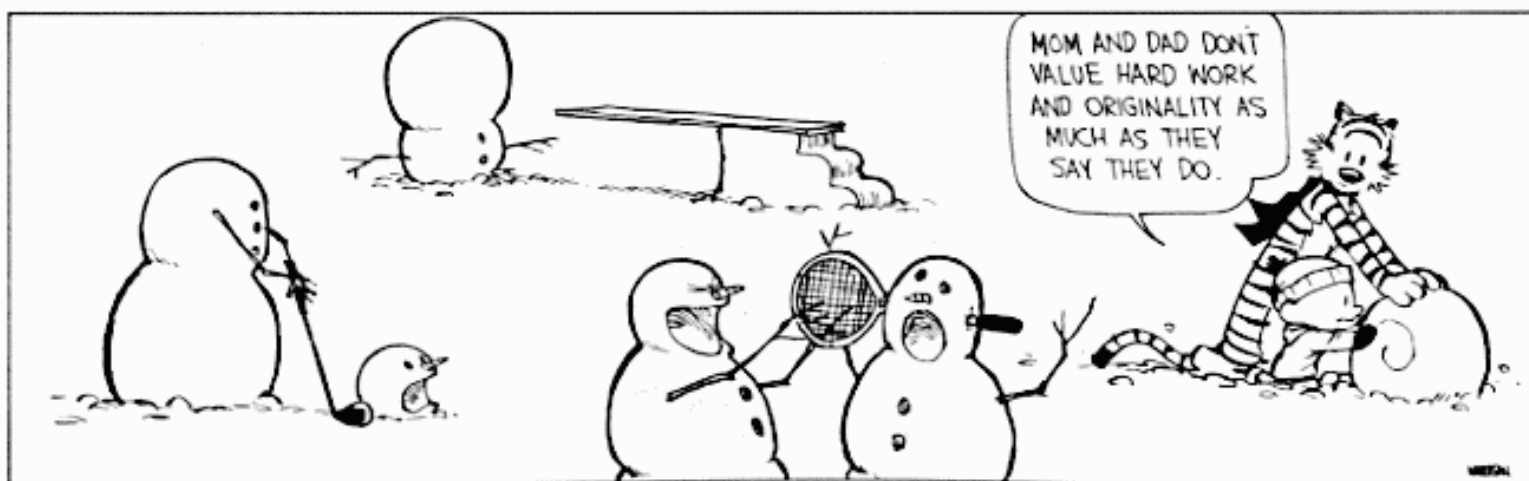


# Distributing and using injury data held by the Ministry of Health



# Overview

- Who we are
- What injury data is available
- How to access data
- Data complexities
- Data limitations
- Questions

# Analytical Services

## Functions

- distribute data from the National Collections
- Advise on interpretation and analysis of National Collections data

## Contact details

Email: [data-enquiries@moh.govt.nz](mailto:data-enquiries@moh.govt.nz)

# Injury data available

- National Minimum Dataset (NMDS)
  - public and private hospital events
  
- New Zealand Mortality Collection
  - A record of all deaths that occur in New Zealand
  - Includes cause of death information
  
- National Non-Admitted Patients Collection (NNPAC)
  - Outpatient events (ED contacts)

# Injury related publications

- “Suicide Facts: Deaths and intentional self-harm hospitalisations”
- “Selected morbidity data for publicly funded hospitalisations”
- “Mortality and demographic data”

## Access

- Publications are available in hard copy or on the Ministry’s website
- Provisional data and detailed publication datasets are also online
  - <http://www.moh.govt.nz/moh.nsf/indexmh/dataandstatistics>

# Accessing data

- Analytical Services are available to respond to data requests
- Customised requests may incur a charge on a cost recovery basis
- Aggregate data and anonymised unit record datasets are available
- Identifiable information can be released subject to resolution of relevant privacy issues (generally via HIPC exceptions)
- Completeness of hospital and mortality data limits availability

# Demographic information

Demographic variables are available with hospital, mortality and ED data

- Ethnicity
- Date of birth
- Age
- Sex
- Domicile (often DHB or TLA of domicile)
- Deprivation (based on domicile code)

# Identifying accidents and injuries

## Hospital data

- Diagnosis codes (injury and poisoning, S00-T99)
- External cause codes (V00-Y99)
  - Includes treatment injuries (misadventure/adverse effects)
  - No indicator of whether before or after that admission
  - Accident dates are potentially erroneous
- Accident flag
  - Reported before ACC has decided on the claim
- ACC number
  - Reported before ACC has decided on the claim
- Admission type
  - Admission types AC (and AA) can be used in conjunction with clinical codes to identify acute events

# Identifying accidents and injuries

## Mortality data

- Simpler than hospital data
- Identify accidents and intentional injuries via the underlying cause of death
- Deaths are coded by mechanism using codes V00-Y99

# Comparing and contrasting hospital and mortality data

## Hospital

- Changes implemented 1 July
- Codes are mapped to older ICD versions
- Up to 99 clinical codes possible, including multiple external cause
- Potentially multiple hospital events for a single accident
- Ethnicity data self identified but not all patients may be asked

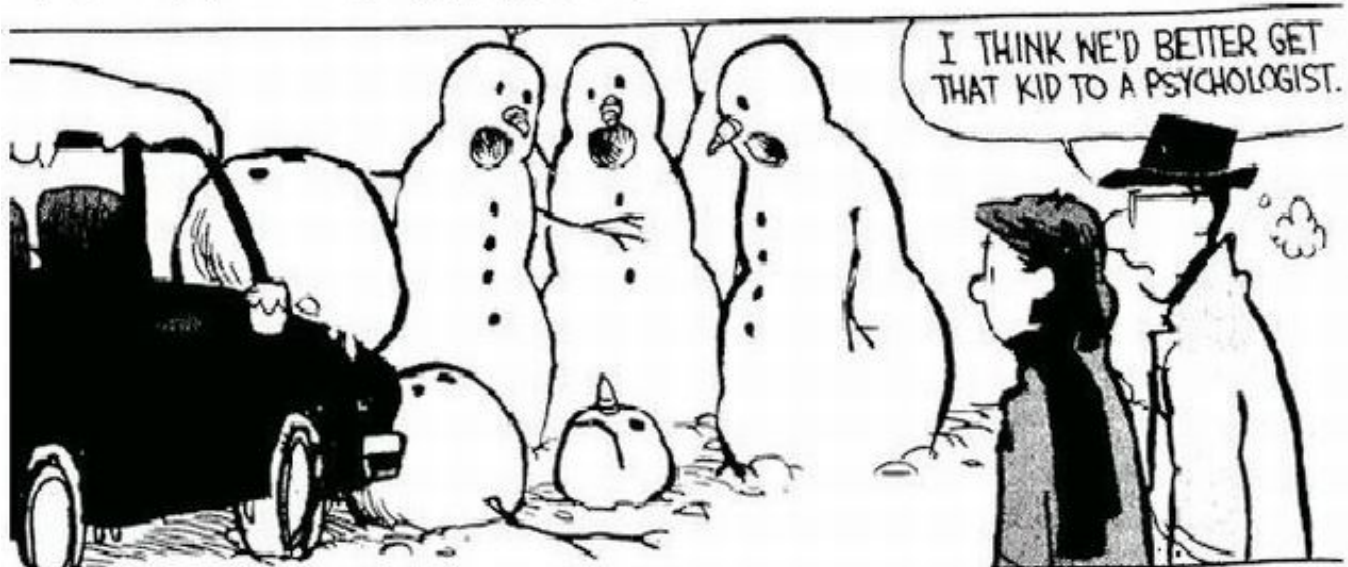
## Mortality

- Changes implemented 1 January
- No mapping due to changes to rules about assigning causes
- One underlying cause of death possible
- Only a single death event possible
- Ethnicity data comes from asking the family of the deceased

# ICD version considerations

- Since the 1990s injury data has been coded in up to five ICD versions: ICD-9, ICD-10 (I, II, III, VI)
- The switch to ICD-10 involved a large change to the structure of external cause codes
- Changes have generally expanded the supplementary information captured (e.g. location, activity, perpetrator (for assault))
- For some analyses it may be best to get data in the version it was reported in
- For other analyses it may be easier to use data in a single version (generally the earliest)
- With the exception of burns there is no measure of severity attached to injury data

# Example – motor vehicle accidents



# Example - motor vehicle accidents

- ICD-9 and ICD-10 codes are ordered and categorised very differently...
- The focus changed from the type of accident to the person who was injured
- ICD-9: 810-825
- ICD-10: V02-V04, V09.0-V09.3, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V29, V30-V39, V40-V49, V50-V59, V60-V69, V70-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83.0-V83.3, V84.0-V84.3, V85.0-V85.3, V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2, V89.9

# Effects of hospital admission practices

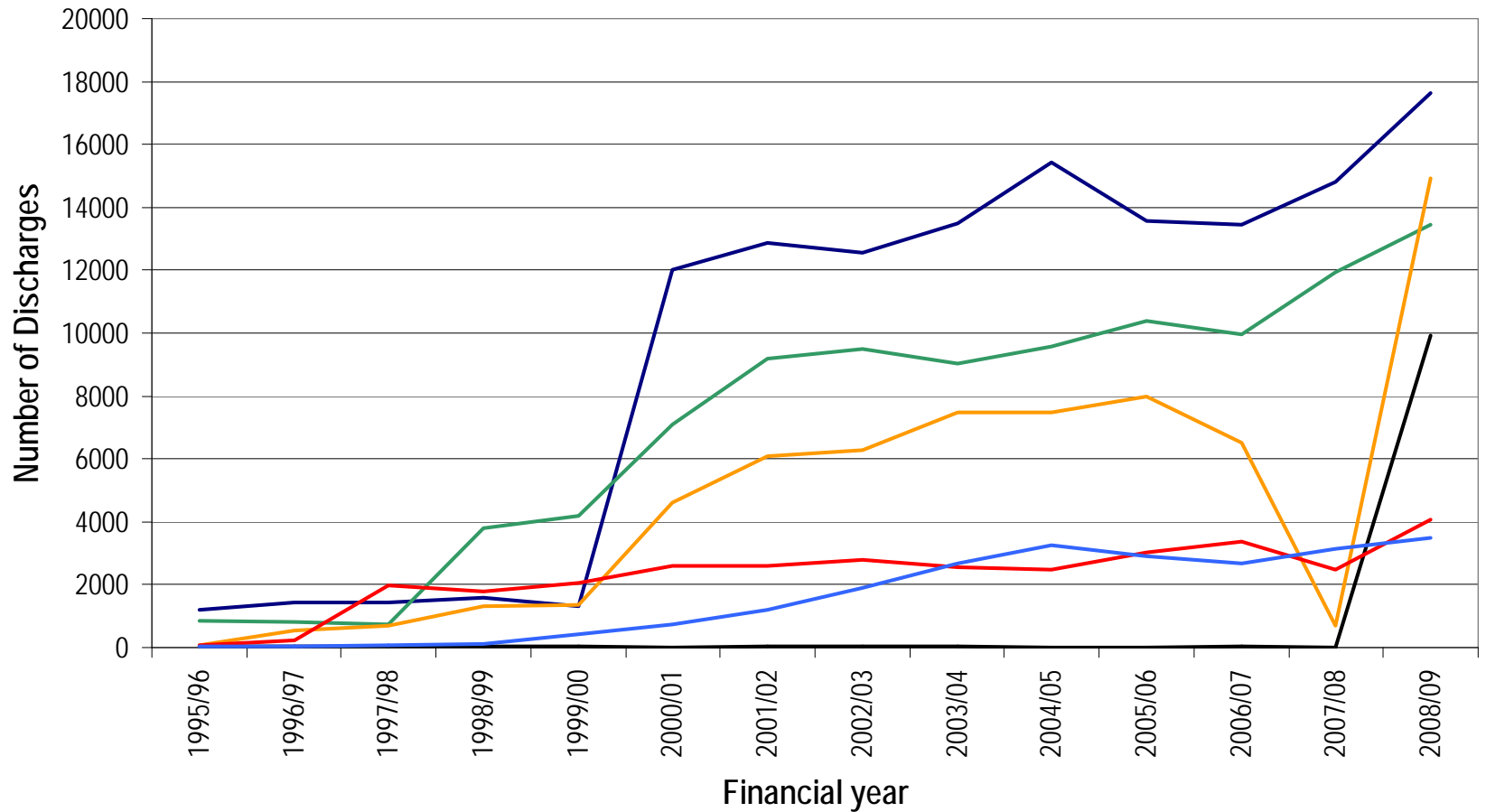
Changes impact the volume of reported hospitalisations

- Day patient reporting began 1987 but not mandatory until 1993
- Only one external cause code able to be reported prior to 1 July 1995
- Reporting of short stay ED events is complex and variable (see next slide)

# Short stay ED events in NMDS

- Historically short stay ED events (patients seen in ED and then discharged without admission) were not reported to NMDS as they were outpatient events
- Starting 1999, one DHB began reporting these if patients had received 3 hours of treatment
- Over the next several years other DHBs began to do the same until around half were in 2008
- The result is a large increase in the number of reported injury hospitalisations (around 50%)
- To allow comparisons over time or between regions, these events need to be filtered out
- From July 2009 reporting of short stay ED events has been compulsory

### Short Stay Emergency Department Discharges 95/96-08/09





**Any questions?**