

Tools, techniques and framework for the analysis of vital statistics data on external causes of injury death

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Our goals for the course

- Understand the nature and structure of U.S. mortality data, particularly for records involving injury-related deaths
- Gain knowledge on tools for classifying and analyzing deaths from external causes
 - EC mortality matrix
 - Injury Diagnoses matrix
- Review selected figures, charts and tables from currently trending topics in public health
- Learn about resources on the web and elsewhere that will help analysts be more productive in the area of injury mortality statistics

Data flow - mortality



Death certificate data



from all U.S.



registration areas

NCHS

CAUSE OF DEATH (See instructions and examples)

32. PART I. Enter the chain of events - - diseases, injuries, or complications - - that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.

IMMEDIATE CAUSE (Final disease or condition resulting in death)

a. _____
Due to (or as a consequence of):

b. _____
Due to (or as a consequence of):

c. _____
Due to (or as a consequence of):

d. _____

Sequentially list conditions, if any, leading to the cause listed on line a. Enter the **UNDERLYING CAUSE** (disease or injury that initiated the events resulting in death) **LAST**



Approximate interval:
Onset to death

Part I: Lines 1-4
Causes of death are entered sequentially starting with immediate cause and ending with the underlying cause.

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in Part I.

33. WAS AN AUTOPSY PERFORMED?

Part II
Other significant conditions contributing to death

35. DID TOBACCO USE CONTRIBUTE TO DEATH?

- Yes Probably
- No Unknown

36. IF FEMALE:

- Not pregnant within past year
- Pregnant at time of death
- Not pregnant but pregnant within 42 days of death
- Not pregnant but pregnant 43 days to 1 year before death
- Unknown if pregnant within the past year

29. MANNER

- Natural
- Accident
- Suicide
- Homicide
- Could not be Determined

38. DATE OF INJURY
(Mo/Day/Yr)(Spell Month)

39. TIME OF INJURY

40. PLACE OF INJURY (e.g., Decedent's home, construction site, restaurant, wooded area)

41. INJURY AT WORK?
 Yes No

42. LOCATION OF INJURY: State:
Street & Number:

City or Town:

43. DESCRIBE HOW INJURY OCCURRED

Box 43. How injury occurred
Generally determines external cause of deaths involving injuries.

To Be Completed By:
MEDICAL CERTIFIER

Various concepts involved in defining injury-related mortality

- Cause of death
 - Underlying cause: “The disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury”
 - Multiple causes: causes of death including not only the underlying cause but also immediate cause of death and all other intermediate and contributory conditions entered by the certifying physician

Various concepts involved in defining injury-related mortality, cont.

- Cause of death
 - Injury death: Those caused by acute exposure to physical agents in amounts or at rates that exceed the threshold of human tolerance; may also be the result of a forcible deprivation of an essential substance (e.g., oxygen if drowning)
 - External causes of injury: Refer to the circumstances of the event that led to the injury / injuries that caused the death of the person. Includes intent – whether accident or intentional violence – mechanism and objects that might have played role and, sometimes, the activity involved.

Various concepts involved in defining injury-related mortality, cont.

- Elements of the “External Cause” of injury
 - Intent: Unintentional (accident), Intentional self-harm (suicide), Assault (homicide), Undetermined, Legal intervention / war
 - Mechanism: The vector that transfers the damaging energy to the body (e.g., fall, firearm, motor vehicle crash)

List of specified mechanisms of injury death

Cut/pierce	All transport	Natural/environmental
Drowning	Motor vehicle traffic	Overexertion
Fall	Occupant	Poisoning
Fire/hot object or substance	Motorcyclist	Struck by or against
Fire/flame	Pedal cyclist	Suffocation
Hot object/substance	Pedestrian	
Firearm	Other	
Machinery	Unspecified	
	Pedal cyclist, other	
	Pedestrian, other	
	Other land transport	
	Other transport	

Various concepts involved in defining injury-related mortality, cont.

- Elements of the injury diagnosis
 - Body region: Organized anatomically from head to foot, but may also allow for broad and system-wide values
 - Nature of the injury: Describes in more detail the type of damage visited on the body; examples include open wound, fracture, dislocation, crushing, burn, corrosion, poisoning, etc

The Tenth Revision of the International Classification of Diseases (ICD-10)

- Chapter XIX “Injury, poisoning and certain other consequences of external causes (S00-T98)”
 - These injury codes cannot be selected as an underlying cause of death – that role is reserved for the external cause of the injury
 - S00 – S99 organized by specified body region (from head to foot)
 - T00 – T98 reserved for injuries and toxic effects with a more generalized effect over the body (e.g., burns, corrosions, poisonings and complications of surgical and medical care, as well as unspecified effects and sequelae of injuries)

**Injury, poisoning and certain other consequences of external causes
(S00-T98)**

Excludes: birth trauma (P10-P15)
obstetric trauma (O70-O71)

This chapter contains the following blocks:

S00-S09	Injuries to the head
S10-S19	Injuries to the neck
S20-S29	Injuries to the thorax
S30-S39	Injuries to the abdomen, lower back, lumbar spine and pelvis
S40-S49	Injuries to the shoulder and upper arm
S50-S59	Injuries to the elbow and forearm
S60-S69	Injuries to the wrist and hand
S70-S79	Injuries to the hip and thigh
S80-S89	Injuries to the knee and lower leg
S90-S99	Injuries to the ankle and foot

**Injury, poisoning and certain other consequences of external causes
(S00-T98)**

Excludes: birth trauma (P10-P15)
obstetric trauma (O70-O71)

This chapter contains the following blocks:

T00-T07	Injuries involving multiple body regions
T08-T14	Injuries to unspecified parts of trunk, limb or body region
T15-T19	Effects of foreign body entering through natural orifice
T20-T32	Burns and corrosions
T33-T35	Frostbite
T36-T50	Poisoning by drugs, medicaments and biological substances
T51-T65	Toxic effects of substances chiefly nonmedicinal as to source
T66-T78	Other and unspecified effects of external causes
T79	Certain early complications of trauma
T80-T88	Complications of surgical and medical care, not elsewhere classified
T90-T98	Sequelae of injuries, of poisoning and of other consequences of external causes

S11**Open wound of neck**

Excludes: decapitation (S18)

S11.0**Open wound involving larynx and trachea**

Trachea:

- NOS
- cervical

Excludes: thoracic trachea (S27.5)

S11.1**Open wound involving thyroid gland****S11.2****Open wound involving pharynx and cervical oesophagus**

Excludes: oesophagus NOS (S27.8)

S11.7**Multiple open wounds of neck****S11.8****Open wound of other parts of neck****S11.9****Open wound of neck, part unspecified**

T40 **Poisoning by narcotics and psychodysleptics [hallucinogens]**

Excludes: intoxication meaning inebriation (F10-F19)

T40.0 **Opium**

T40.1 **Heroin**

T40.2 **Other opioids**

Codeine

Morphine

T40.3 **Methadone**

T40.4 **Other synthetic narcotics**

Pethidine

T40.5 **Cocaine**

T40.6 **Other and unspecified narcotics**

T40.7 **Cannabis (derivatives)**

T40.8 **Lysergide [LSD]**

T40.9 **Other and unspecified psychodysleptics [hallucinogens]**

Mescaline

Psilocin

Psilocybine

The Tenth Revision of the International Classification of Diseases (ICD-10)

- Chapter XX “External causes of morbidity and mortality (V01-Y89)”
 - These codes can be selected as an underlying cause of death
 - Organized primarily by intent and then by mechanism; further axes of classification are added depending on complexity of event described (e.g., unintentional transport fatalities)

Chapter XX “External causes of morbidity and mortality (V01-Y89)”

- V01 – X59 Accidents (aka “unintentional injuries”)
 - V01-V99 Transport accidents
 - V01-V89 Land transport
 - V90-V94 Water transport
 - V95-V97 Air & space transport
 - V98-V99 Other & unspecified transport
 - W00-X59 Other external causes of accidental injury
 - W00-W19 Falls
 - W65-W74 Drowning and submersion
 - X00-X09 Exposure to smoke, fire, flames
 - X40-X49 Poisoning

Chapter XX “External causes of morbidity and mortality (V01-Y89)”

- X60 – X84 Intentional self-harm (aka “suicide”)
 - X60-X69 Self poisoning
 - X72-X74 Discharge of firearm
- X85 – Y09 Assault (aka “homicide”)
 - X93-X95 Discharge of firearm
- Y10 – Y34 Event of undetermined intent

Chapter XX “External causes of morbidity and mortality (V01-Y89)”

- Y35 – Y36 Legal intervention and operations of war
- Y40 – Y84 Complications of medical & surgical care
- Y85 – Y89 Sequelae of external causes of morbidity and mortality

Analyzing “unintentional motor vehicle traffic deaths”

- Accidents leading to death that involve at least one motorized vehicle and that occur on a public highway
- Under ICD-9 (1979-1998), these deaths were categorized as a continuous block E810-E819
- The comparable set of ICD-10 codes are interspersed among different rubrics of the “Land transport” category:

```
V02-V04 [.1, .9], V09.2, V12-V14  
[.3-.9], V19 [.4-.6], V20-V28  
[.3-.9], V29-V79 [.4-.9],  
V80 [.3-.5], V81.1, V82.1,  
V83-V86 [.0-.3], V87 [.0-.8],  
V89.2
```

```
Save Run Stop Select Server Export Send To Create Properties
IF (('V30'<=DEATH<='V79' AND 4<=C4<=9) OR
('V81'<=DEATH<='V82' AND C4=1) OR ('V83'<=DEATH<='V86'
AND 0<=C4<=3)) OR
(('V20'<=DEATH<='V28' AND 3<=C4<=9) OR
(DEATH='V29' AND (4<=C4<=9))) OR
(('V12'<=DEATH<='V14' AND 3<=C4<=9) OR
(DEATH='V19' AND (4<=C4<=6))) OR
(('V02'<=DEATH<='V04' AND C4 IN (1,9)) OR
CDEATH='V092') OR
(DEATH='V80' AND 3<=C4<=5) OR
((DEATH='V87' AND 0<=C4<=8) OR CDEATH='V892') THEN CAUSEL=07;
IF (DEATH IN ('V10', 'V11', 'V15', 'V16', 'V17', 'V18') OR
('V12'<=DEATH<='V14' AND 0<=C4<=2) OR
(DEATH='V19' AND 0<=C4<=3) OR CDEATH='V198'
OR CDEATH='V199') THEN CAUSEL=08;
IF ((DEATH IN ('V01', 'V05', 'V06')) OR
('V02'<=DEATH<='V04' AND C4=0) OR (DEATH='V09'
AND C4 IN (0,1,3,9))) THEN CAUSEL=09;
IF ('V20'<=DEATH<='V28' AND 0<=C4<=2) OR
(DEATH='V29' AND 0<=C4<=3) OR
('V30'<=DEATH<='V79' AND 0<=C4<=3) OR
(DEATH IN ('V80') AND C4 IN (0,1,2,6,7,8,9)) OR
(DEATH IN ('V81', 'V82') AND C4 IN (0,2,3,4,5,6,7,8,9)) OR
('V83'<=DEATH<='V86' AND 4<=C4<=9) OR
(CDEATH IN ('V879')) OR
```

Source: "Injury Data and Resources" at http://www.cdc.gov/nchs/injury/injury_tools.htm

Analyzing “unintentional motor vehicle traffic deaths”

- These deaths can be further classified as :
 - Occupant (of cars, buses)
 - Motorcyclist
 - Pedal cyclist (bicycle)
 - Pedestrian
 - Other (e.g., riding an animal while hit by a car)
 - Unspecified

CDC WONDER – “Wide-ranging Online Data for Epidemiologic Research”

The screenshot shows the CDC WONDER website in a browser window. The browser's address bar displays "CDC WONDER" and "iGoogle". The website's header features the CDC logo and navigation links for "CDC Home", "Search", and "Health Topics A-Z". Below the header, a secondary navigation bar includes "WONDER Home", "FAQ", "Help", "Contact Us", and "Search". A central text block states: "WONDER online databases utilize a rich ad-hoc query system for the analysis of public health data. Reports and other query systems are also available." Below this, there are tabs for "WONDER Systems", "Topics", and "A-Z Index". The main content area is organized into three columns of links:

- WONDER Online Databases**
 - ▶ [AIDS Public Use Data](#)
 - ▶ [Births](#)
 - ▶ [Cancer Statistics](#)
- Environment**
 - ▶ [Daily Air Temperatures](#)
 - ▶ [Daily Fine Particulate Matter](#)
- Mortality**
 - Underlying Cause of Death**
 - ▶ [Detailed Mortality](#)
 - ▶ [Compressed Mortality](#)
 - ▶ [Multiple cause of death \(Detailed Mortality\)](#)

On the right side of the main content area:

- Reports and References**
 - [Prevention Guidelines \(archive\)](#)
 - [Scientific Data and Documentation](#)
- Other Query Systems**
 - ▶ [Healthy People 2010](#)
 - ▶ [MMWR Morbidity Tables](#)
 - ▶ [MMWR Mortality Tables](#)

The left sidebar contains a search box and several informational links: "What is WONDER?", "Frequently Asked Questions", "Data Use Restrictions", "Data Collections", "Citations", "Republishing WONDER Data", and "What's New?".

<http://wonder.cdc.gov/>

Analyzing “unintentional motor vehicle traffic deaths”

- What are the recent trends in numbers of deaths from unintentional MVT in the U.S.?
- How do trends compare according to decedent’s role (car occupant, biker, cyclist, pedestrian)?
- Which type of MVT decedent is likelier to suffer from a traumatic brain injury? Cyclists or pedestrians?

CDC WONDER iGoogle

CDC Home Search Health Topics A-Z

CDC WONDER

WONDER Home FAQ Help Contact Us Search

WONDER online databases utilize a rich ad-hoc query system for the analysis of public health data. Reports and other query systems are also available.

WONDER Systems Topics A-Z Index

- WONDER Online Databases**
 - ▶ [AIDS Public Use Data](#)
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What is WONDER?
Frequently Asked Questions
Data Use Restrictions
Data Collections
Citations
Republishing WONDER Data
What's New?





Multiple Cause of Death, 1999-2009 Request

- Request Form | Results | Map | Chart | About

[Multiple Cause of Death Data](#) | [Dataset Documentation](#) | [Data Use Restrictions](#) | [How to Use WONDER](#)

Reset

Make all desired selections and then click any **Send** button one time to send your request.

1. Organize table layout: Send Help

Group Results By

And By

And By

And By

And By

Note:
See the [Rate options](#) section below to choose standard or non-standard age-adjusted rates, or to adjust the number rates are calculated for.

Optional Measures (Check box to include in results.)

Crude Rate Standard Error

Crude Rate 95% Confidence Interval

Percent of Total

Title



WONDER

Request Form

Results

Multiple Cause of Death Data

- Age Groups
- Autopsy
- Gender
- Hispanic Origin
- MCD - ICD Chapter
- MCD - ICD Sub-Chapter
- Multiple Cause of death
- MCD - ICD-10 113 Cause List
- MCD - ICD-10 130 Cause List (Infants)
- MCD - Drug/Alcohol Induced Causes
- Place of Death
- Race
- Region
- Division
- State
- County
- UCD - ICD Chapter
- UCD - ICD Sub-Chapter
- Underlying Cause of death
- UCD - ICD-10 113 Cause List
- UCD - ICD-10 130 Cause List (Infants)
- UCD - Injury Intent
- UCD - Injury Mechanism & All Other Leading Causes
- UCD - Drug/Alcohol Induced Causes
- Urbanization
- Weekday
- Year
- Month
- Year
- None
- None
- None
- None

1. Organize table layout

Group Results By

And By

And By

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And By

Optional Measures (Check box to include in results.)

- Crude Rate Standard Error
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- Percent of Total

Title

s A-Z

Contact Us

Search

1999-2009 Request

How to Use WONDER

Reset

Click button one time to send your request.

Send

Help

Note:

See the [Rate options](#) section below to choose standard or non-standard age-adjusted rates, or to adjust the number rates are calculated for.

6. Select underlying cause of death:

Send Help

Click a button to select ICD codes by Chapters or by Groups.

- [UCD - ICD-10 Codes](#)
- [UCD - ICD-10 113 Cause List](#)
- [UCD - ICD-10 130 Cause List \(Infectious\)](#)
- [UCD - Injury Intent and Mechanism](#)
- [UCD - Drug/Alcohol Induced Causes](#)

Browse or search to find items in the UCD - ICD-10 Codes Finder Tool, then highlight the items to use for this request. (The *Currently selected* box displays all current request items.)

[Finder Tool Help](#) [Advanced Finder Options](#)

Browse Search Details

UCD - ICD-10 Codes

- *All* (All Causes of Death)
- + A00-B99 (Certain infectious and parasitic diseases)
- + C00-D48 (Neoplasms)
- + D50-D89 (Diseases of the blood and blood-forming organs and
- + E00-E88 (Endocrine, nutritional and metabolic diseases)
- + F01-F99 (Mental and behavioural disorders)
- + G00-G98 (Diseases of the nervous system)
- + H00-H57 (Diseases of the eye and adnexa)
- + H60-H93 (Diseases of the ear and mastoid process)
- + I00-I99 (Diseases of the circulatory system)

Open Open Fully Close Close All

Browse the list by opening and closing items.
Use Ctrl+Click to multiple select, Shift+Click for a range.

Currently selected:

- *All* (All Causes of De

7. Select multiple cause of death:

Send Help

Browser navigation bar with address bar (http://wonder.cdc.gov/controller/datarequest/D77), menu bar (File, Edit, View, Favorites, Tools, Help), and tabs (Multiple Cause of Death, iGoogle).

Unknown

Other

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Click a button to select ICD codes by Chapters or by Groups.

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- [UCD - Drug/Alcohol Induced Causes](#)

UCD - Injury Intent

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- Unintentional
- Suicide
- Homicide
- Undetermined
- Legal Intervention / Operations of War
- Non-Injury, no intent classified

UCD - Injury Mechanism & All Other Leading Causes

- All Causes of Death
- Cut/Pierce
- Drowning
- Fall
- Fire/Flame
- Hot object/Substance
- Firearm
- Machinery
- Motor Vehicle Traffic
- Other Pedal cyclist
- Other Pedestrian

Hint: Use Ctrl + Click for multiple selections, or Shift + Click for a range.

7. Select multiple cause of death:

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- [MCD - Drug/Alcohol Induced Causes](#)

Browser navigation bar with address: <http://wonder.cdc.gov/controller/datarequest/D77>

File Edit View Favorites Tools Help

Multiple Cause of Death, ... x iGoogle

Unknown

Other

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UCD - Injury Intent

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Browser navigation bar with address: <http://wonder.cdc.gov/controller/datarequest/D77>

File Edit View Favorites Tools Help

Convert Select

Favorites Bus to New York City from ... megabus US - Home Metro - Rider Tools - Trip Pl...

Multiple Cause of Death, ... iGoogle

Home RSS Mail Print Page Safety Tools

Note: Use both selection boxes to select results that contain items from both the first AND second box. See the [feature description](#) for more information.

Note: Javascript must be enabled for the "Move" and "Clear" buttons to work. Enter or clear codes by hand if the buttons don't work.

8. Select rate options: Send Help

Calculate Rates Per

- 1,000
- 10,000
- 100,000**
- 1,000,000

Age-Adjusted Rate Options *(only available for the ten-year age groups)*

- No age-adjusted rates
- Use standard age-adjusted rates
- Use non-standard age-adjusted rates

9. Other options: Send Help

Export Results (Check box to download results to a file)

Show Totals

Show Zero Values

Show Suppressed Values

Precision 1 decimal places

Data Access Timeout 5 minutes



Multiple Cause of Death, 1999-2009 Results

Request Form

Results

Map

Chart

About

[Multiple Cause of Death Data](#)[Dataset Documentation](#)[Help for Results](#)[Printing Tips](#)[Help with Exports](#)

Export

Reset

Quick Options

More Options

Top

[Notes](#)[Citation](#)[Query Criteria](#)

Year ↓	→ Deaths ↑↓	↔ Population ↑↓	← Crude Rate Per 100,000 ↑↓
1999	40,965	279,040,168	14.7
2000	41,994	281,421,906	14.9
2001	42,443	285,317,572	14.9
2002	44,065	288,368,706	15.3
2003	43,340	290,810,789	14.9
2004	43,432	293,655,404	14.8
2005	43,667	296,410,404	14.7
2006	43,664	299,398,484	14.6
2007	42,031	301,621,157	13.9
2008	37,985	304,059,724	12.5
2009	34,485	307,006,550	11.2
Total	458,071	3,227,110,864	14.2

[Top](#) [Options](#)[Notes](#)[Citation](#)[Query Criteria](#)

File Home Insert Page Layout Formulas Data Review View Acrobat



Normal



Page Break Preview



Custom Views



Page Layout

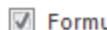
Full Screen

Full Screen

Workbook Views



Ruler



Formula Bar



Gridlines



Headings

Show



Zoom



100%

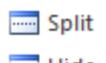


Zoom to Selection

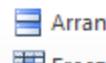
Zoom



New Window



Split



Arrange All



Hide



Freeze Panes



Unhide

Window



Save Workspace



Switch Windows



Macros

Macros

A2

fx

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		Unintentional MVT deaths	Occupant	Motorcyclist	Pedal cyclist	cyclist w TBI	percent cyclists w TBI	Pedestrians	pedestrians w TBI	percent pedestrians w TBI		
3	1999	40,965	18,326	2,254	615	326	53	4,545	1,773	39		
4	2000	41,994	18,649	2,704	572	304	53	4,598	1,761	38		
5	2001	42,443	19,270	2,976	585	294	50	4,822	1,819	38		
6	2002	44,065	21,344	3,153	550	280	51	5,041	1,803	36		
7	2003	43,340	20,720	3,616	572	279	49	4,951	1,824	37		
8	2004	43,432	19,965	3,940	637	312	49	4,839	1,654	34		
9	2005	43,667	19,125	4,296	700	365	52	4,917	1,724	35		
10	2006	43,664	18,277	4,703	688	339	49	5,021	1,791	36		
11	2007	42,031	16,560	4,889	578	241	42	4,820	1,625	34		
12	2008	37,985	13,677	5,037	582	243	42	4,489	1,517	34		
13	2009	34,485	12,349	4,214	529	244	46	4,109	1,439	35		
14												
15												
16												
17												
18												
19												
20												

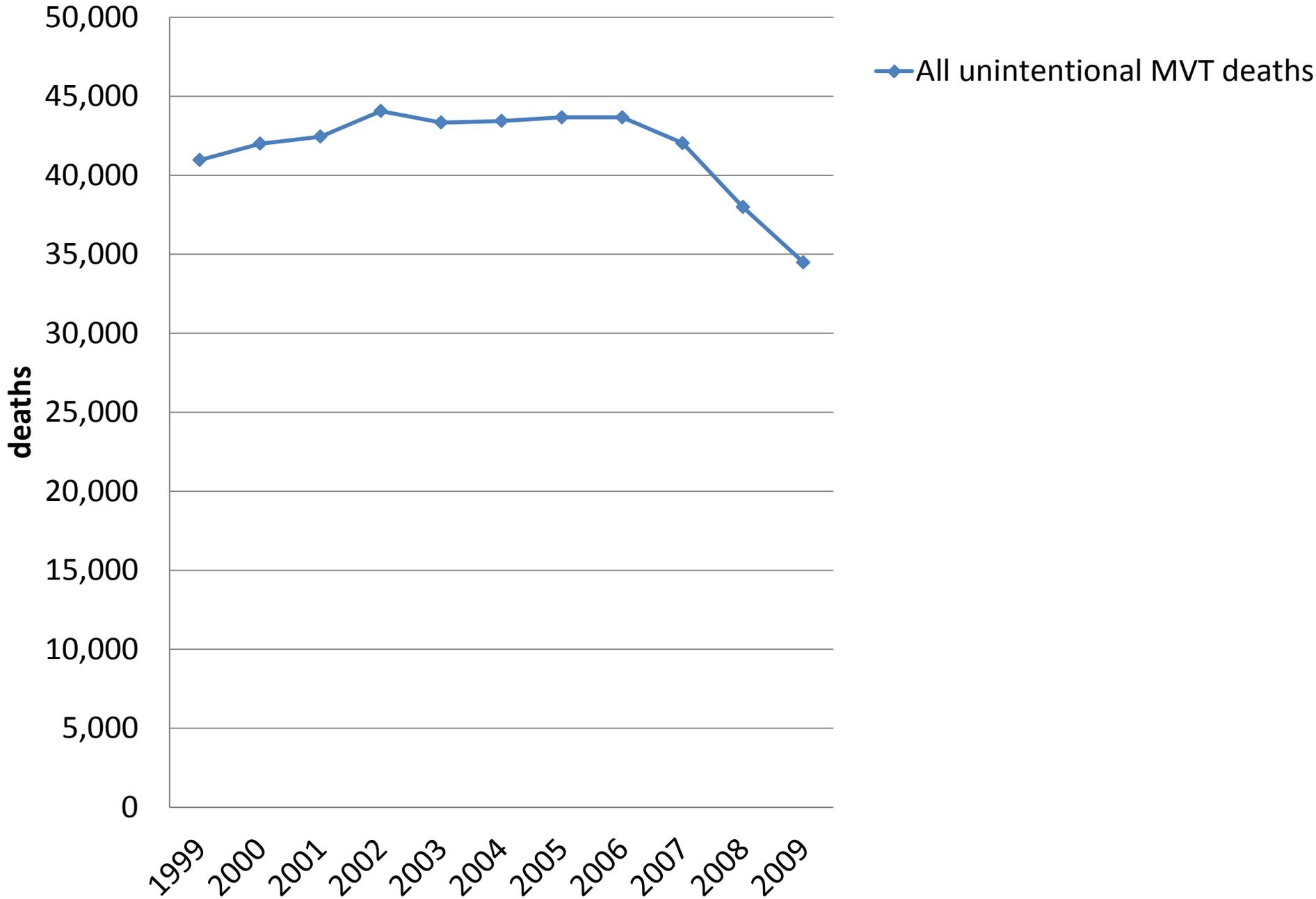
Sheet1

Sheet2

Sheet3



Unintentional MVT deaths



Analyzing “unintentional motor vehicle traffic deaths”

- What are the recent trends in numbers of deaths from unintentional MVT in the U.S.?
- How do trends compare according to decedent’s role (car occupant, biker, cyclist, pedestrian)?
- Which type of MVT decedent is likelier to suffer from a traumatic brain injury? Cyclists or pedestrians?

6. Select underlying cause of death:

Send Help

Click a button to select ICD codes by Chapters or by Groups.

- [UCD - ICD-10 Codes](#) [UCD - ICD-10 130 Cause List \(Infants\)](#) [UCD - Drug/Alcohol Induced Causes](#)
 [UCD - ICD-10 113 Cause List](#) [UCD - Injury Intent and Mechanism](#)

Browse or **search** to find items in the UCD - ICD-10 Codes Finder Tool, then **highlight** the items to use for this request.
(The *Currently selected* box displays all current request items.)

[Finder Tool Help](#) [Advanced Finder Options](#)

Browse Search Details

UCD - ICD-10 Codes

V19.0 (Driver injured in collision with other and	
V19.1 (Passenger injured in collision with othe	
V19.2 (Unspecified pedal cyclist injured in coll	
V19.3 (Pedal cyclist [any] injured in unspecifie	
V19.4 (Driver injured in collision with other and	
V19.5 (Passenger injured in collision with othe	
V19.6 (Unspecified pedal cyclist injured in coll	
V19.8 (Pedal cyclist [any] injured in other spec	
V19.9 (Pedal cyclist [any] injured in unspecifie	
- V20-V29 (Motorcycle rider injured in transport accide	

Currently selected:

V12.3 (Pedal cyclist ir
V12.4 (Pedal cyclist ir
V12.5 (Pedal cyclist ir
V12.9 (Pedal cyclist ir
V13.3 (Pedal cyclist ir
V13.4 (Pedal cyclist ir
V13.5 (Pedal cyclist ir
V13.9 (Pedal cyclist ir
V14.3 (Pedal cyclist ir
V14.4 (Pedal cyclist ir

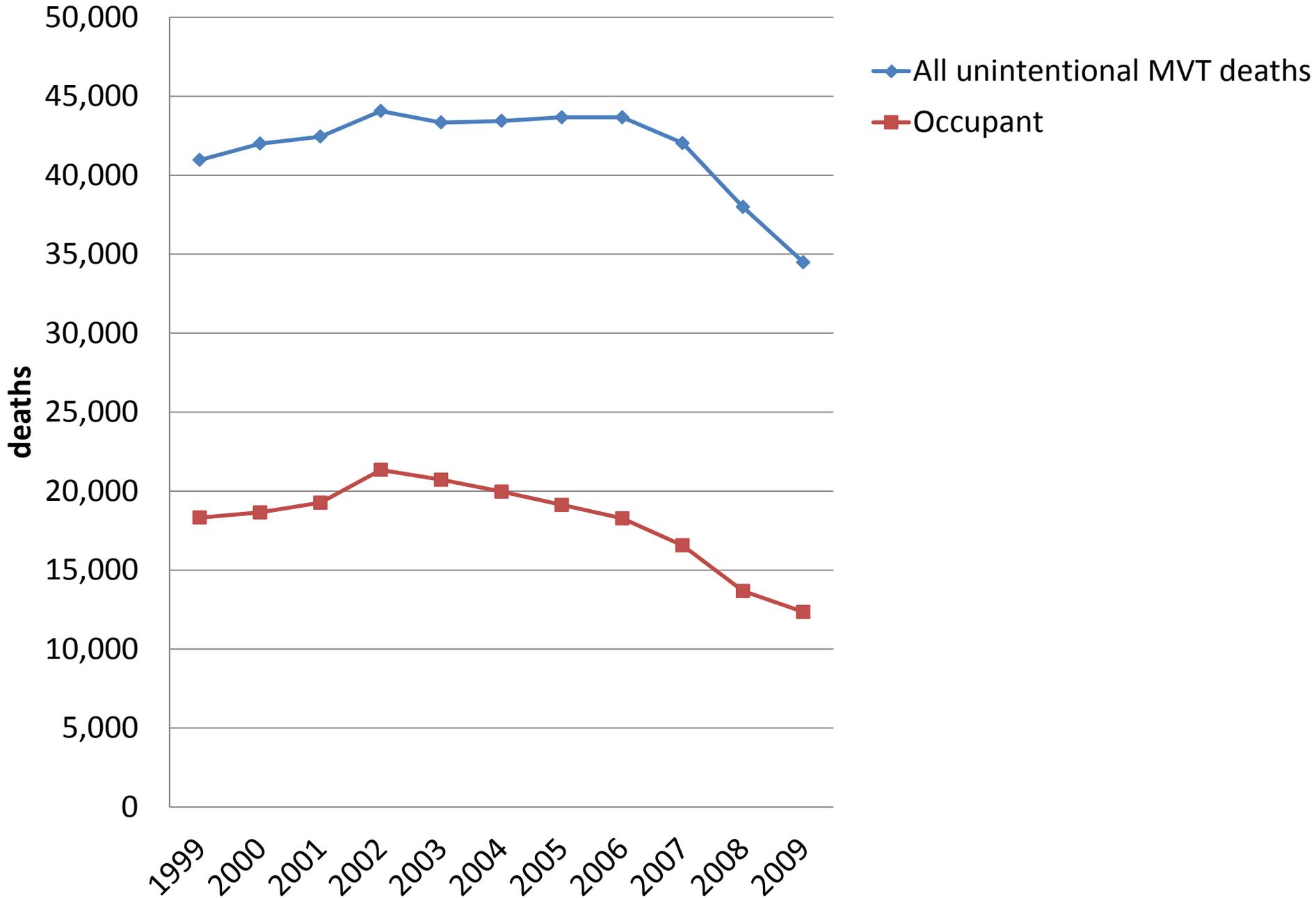
Open Open Fully Close Close All

Browse the list by opening and closing items.
Use Ctrl+Click to multiple select, Shift+Click for a range.

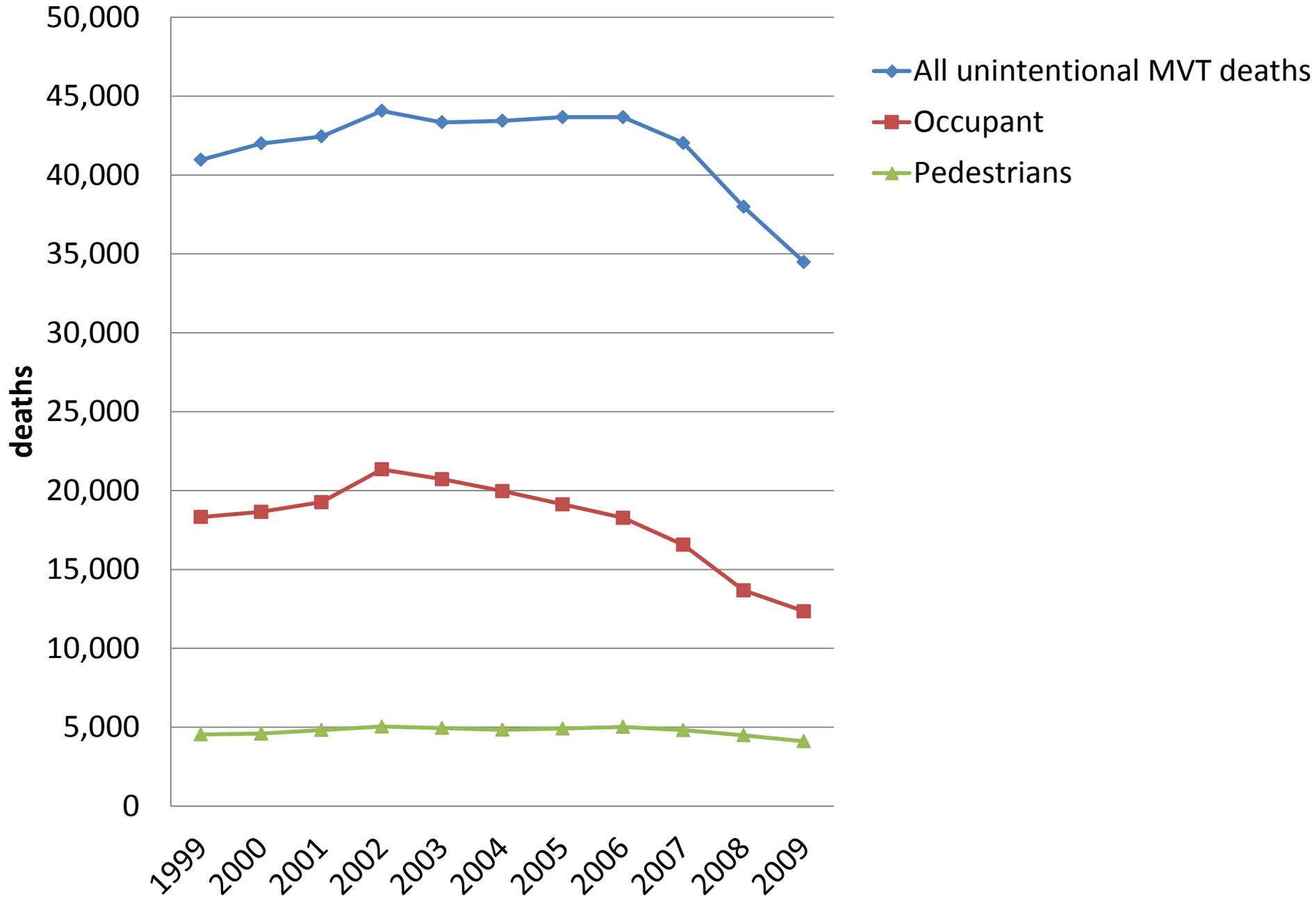
7. Select multiple cause of death:

Send Help

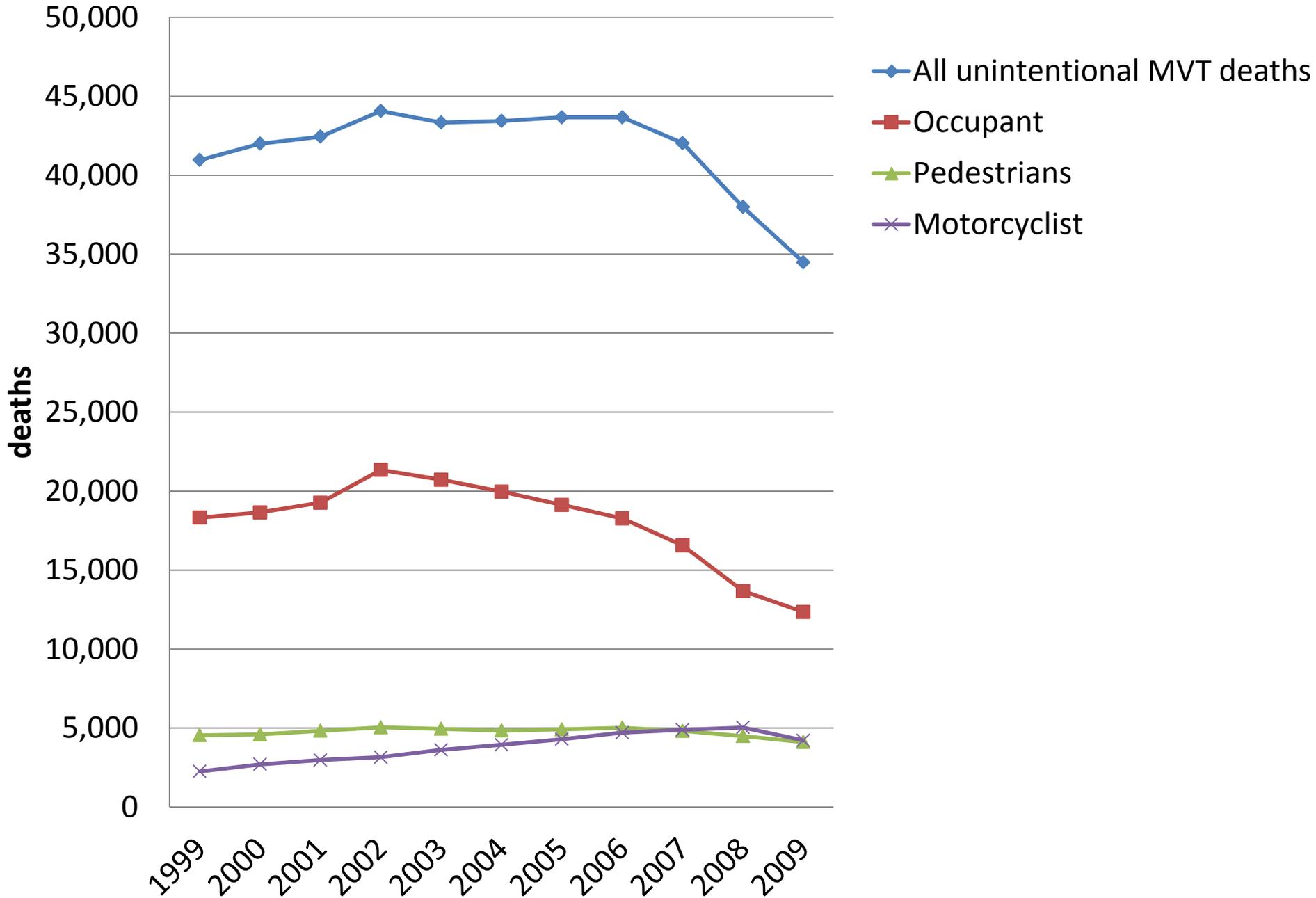
Unintentional MVT deaths



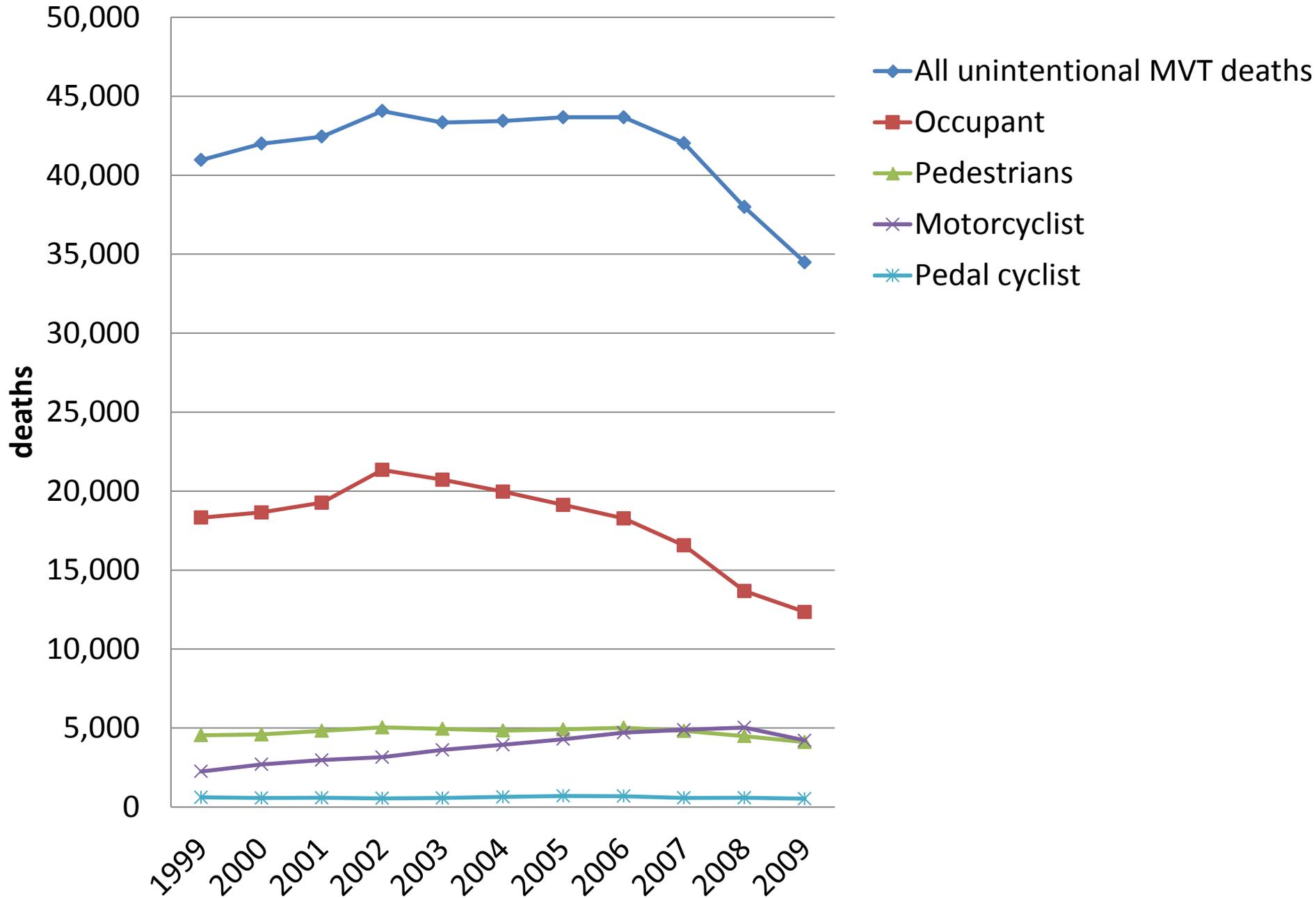
Unintentional MVT deaths



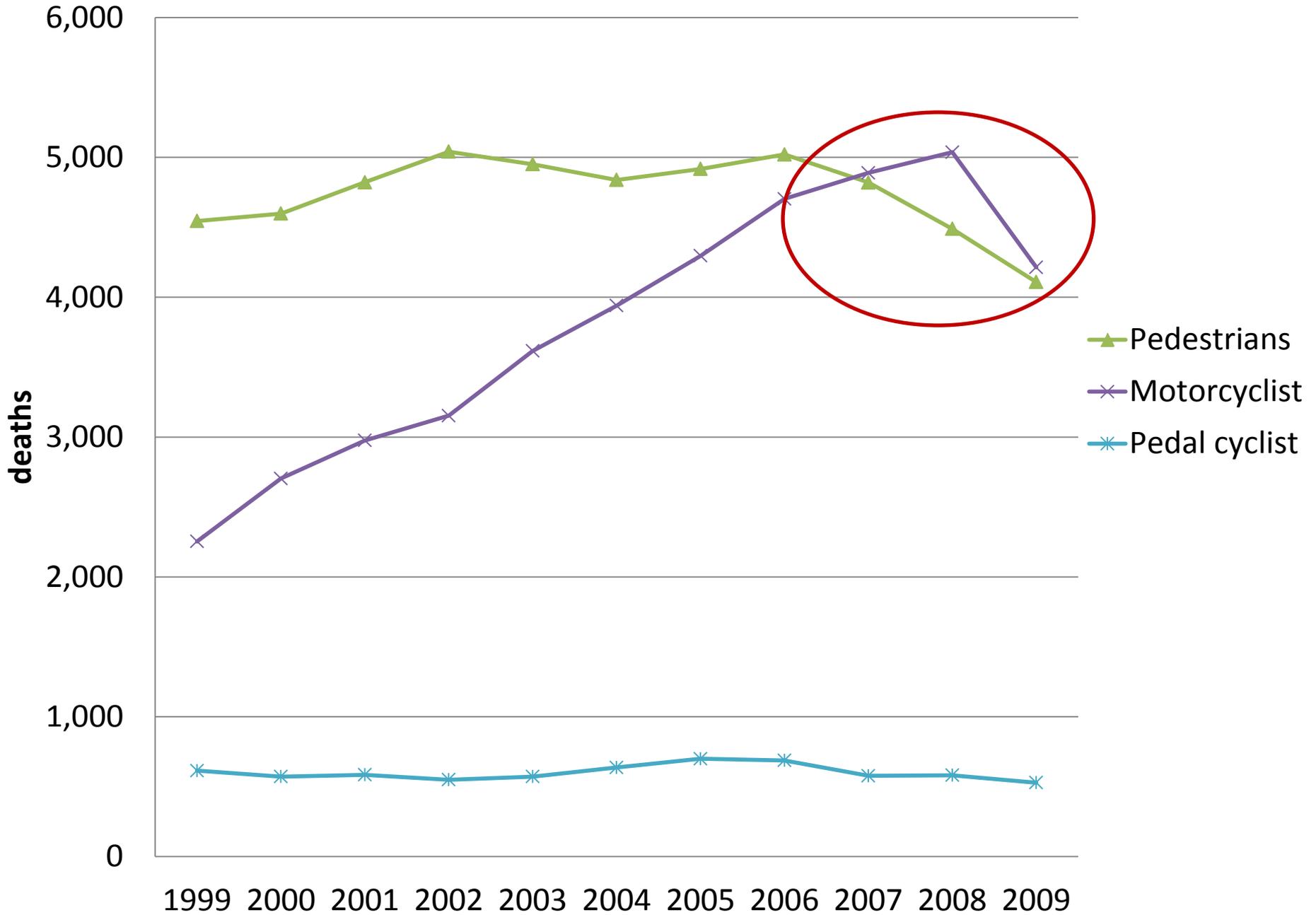
Unintentional MVT deaths



Unintentional MVT deaths



Unintentional MVT deaths



Analyzing “unintentional motor vehicle traffic deaths”

- What are the recent trends in numbers of deaths from unintentional MVT in the U.S.?
- How do trends compare according to decedent’s role (car occupant, biker, cyclist, pedestrian)?
- Which type of MVT decedent is likelier to suffer from a traumatic brain injury? Cyclists or pedestrians?

“Traumatic Brain Injury” (TBI) codes

- S01 - open wound of the head;
- S02.0, S02.1, S02.3, S02.7–S02.9 - fracture of the skull and facial bones;
- S04.0 - injury to optic nerve and pathways;
- S06 - intracranial injury;
- S07 - crushing injury of head;
- S09.7–S09.9 - other and unspecified injuries of head;
- T90.1, T90.2, T90.4, T90.5, T90.8, T90.9 - sequelae of injuries of head.

http://wonder.cdc.gov/controller/datarequest/D77;jsessionid=EDAE5017F0CD84BA75A1BFDC723EF0E

coronado traumatic brain injury

File Edit View Favorites Tools Help

Convert Select

Favorites Bus to New York City from ... megabus US - Home Metro - Rider Tools - Trip Pl...

Multiple ... ICD-10 Ver... Search Res... CDC - Stati... Surveillance... iGoogle

6. Select underlying cause of death:

Send Help

Click a button to select ICD codes by Chapters or by Groups.

- [UCD - ICD-10 Codes](#) [UCD - ICD-10 130 Cause List \(Infants\)](#) [UCD - Drug/Alcohol Induced Causes](#)
 [UCD - ICD-10 113 Cause List](#) [UCD - Injury Intent and Mechanism](#)

Browse or **search** to find items in the UCD - ICD-10 Codes Finder Tool, then **highlight** the items to use for this request.
(The *Currently selected* box displays all current request items.)

[Finder Tool Help](#) [Advanced Finder Options](#)

Browse Search Details

UCD - ICD-10 Codes

V19.0 (Driver injured in collision with other and	
V19.1 (Passenger injured in collision with othe	
V19.2 (Unspecified pedal cyclist injured in coll	
V19.3 (Pedal cyclist [any] injured in unspecifie	
V19.4 (Driver injured in collision with other and	
V19.5 (Passenger injured in collision with othe	
V19.6 (Unspecified pedal cyclist injured in coll	
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V19.9 (Pedal cyclist [any] injured in unspecifie	
- V20-V29 (Motorcycle rider injured in transport accide	

Currently selected:

V12.3 (Pedal cyclist ir
V12.4 (Pedal cyclist ir
V12.5 (Pedal cyclist ir
V12.9 (Pedal cyclist ir
V13.3 (Pedal cyclist ir
V13.4 (Pedal cyclist ir
V13.5 (Pedal cyclist ir
V13.9 (Pedal cyclist ir
V14.3 (Pedal cyclist ir
V14.4 (Pedal cyclist ir

Open Open Fully Close Close All

Browse the list by opening and closing items.
Use Ctrl+Click to multiple select, Shift+Click for a range.

7. Select multiple cause of death:

Send Help

7. Select multiple cause of death:

[Send](#) [Help](#)

Click a button to select ICD codes by Chapters or by Groups.

- [MCD - ICD-10 Codes](#)
- [MCD - ICD-10 130 Cause List \(Infants\)](#)
- [MCD - ICD-10 113 Cause List](#)
- [MCD - Drug/Alcohol Induced Causes](#)

Items in the Select Records box will be used for your request.

Enter codes by hand, one per line, or find items in the Finder Tool and *Move (highlighted) Items Over*.

[Finder Tool Help](#)

Select Records

with any of these items:

- S01.0 (Open wound of
- S01.1 (Open wound of
- S01.2 (Open wound of
- S01.3 (Open wound of

[Clear](#)

AND any of these items:

-

[Clear](#)

Leave box empty, or use *All*, to select all values.

Move Items Over <<<

Move Items Over <<<

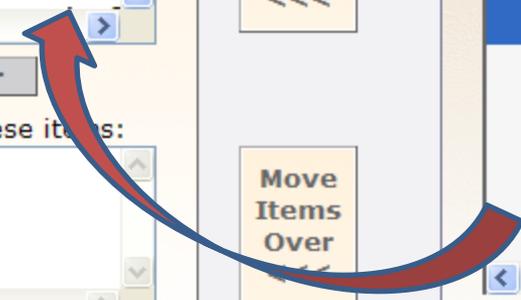
Browse Search Details

MCD - ICD-10 Codes

- 190.2 (Sequelae of fracture of skull and facial bone)
- T90.3 (Sequelae of injury of cranial nerves)
- T90.4 (Sequelae of injury of eye and orbit)
- T90.5 (Sequelae of intracranial injury)
- T90.8 (Sequelae of other specified injuries of head)
- T90.9 (Sequelae of unspecified injury of head)
- T91 (Sequelae of injuries of neck and trunk)
- T91.0 (Sequelae of superficial injury and open wound)
- T91.1 (Sequelae of fracture of spine)
- T91.2 (Sequelae of other fracture of thorax and pelvis)
- T91.3 (Sequelae of injury of spinal cord)
- T91.4 (Sequelae of injury of intrathoracic organs)
- T91.5 (Sequelae of injury of intra-abdominal and pelvic organs)

[Open](#) [Open Fully](#) [Close](#) [Close All](#)

Browse the list by opening and closing items. Use Ctrl+Click to multiple select, Shift+Click for a range.





CDC WONDER

[WONDER Home](#)
[FAQ](#)
[Help](#)
[Contact Us](#)
[Search](#)

Multiple Cause of Death, 1999-2009 Results

[Request Form](#)
[Results](#)
[Map](#)
[Chart](#)
[About](#)
[Multiple Cause of Death Data](#)
[Dataset Documentation](#)
[Help for Results](#)
[Printing Tips](#)
[Help with Exports](#)
[Export](#)
[Reset](#)
[Quick Options](#)
[More Options](#)
[Top](#)
[Notes](#)
[Citation](#)
[Query Criteria](#)

Year ↓	→ Deaths ↑↓	↔ Population ↑↓	← Crude Rate Per 100,000 ↑↓
1999	326	279,040,168	0.1
2000	304	281,421,906	0.1
2001	294	285,317,572	0.1
2002	280	288,368,706	0.1
2003	279	290,810,789	0.1
2004	312	293,655,404	0.1
2005	365	296,410,404	0.1
2006	339	299,398,484	0.1
2007	241	301,621,157	0.1
2008	243	304,059,724	0.1
2009	244	307,006,550	0.1
Total	3,227	3,227,110,864	0.1

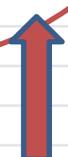
File Home Insert Page Layout Formulas Data Review View Acrobat

Normal Page Break Preview Ruler Formula Bar Zoom 100% Zoom to Selection New Window Split Arrange All Hide Freeze Panes Unhide Save Workspace Switch Windows Macros

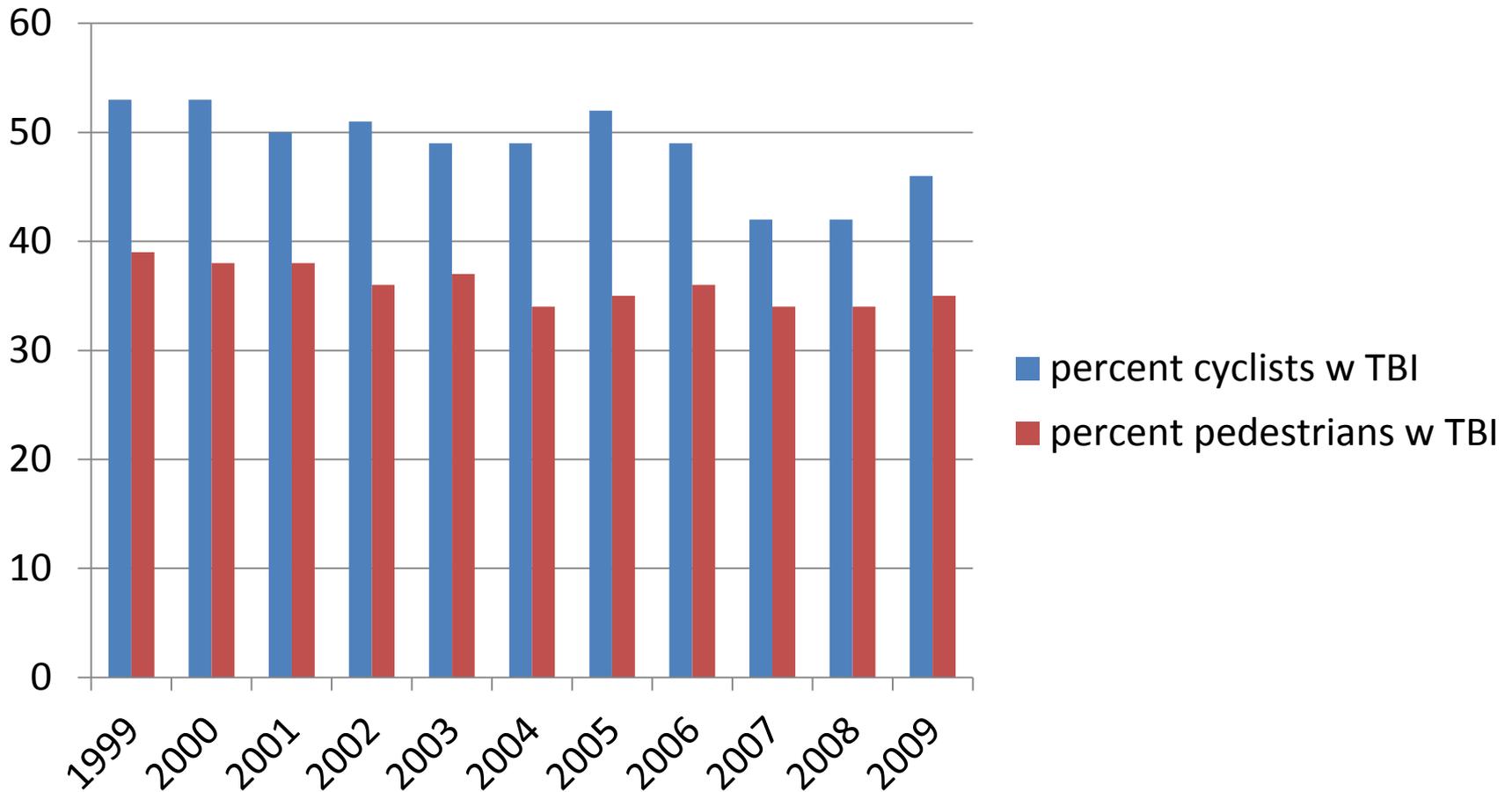
Workbook Views Show Window Macros

A2 fx

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		Unintentional MVT deaths	Occupant	Motorcyclist	Pedal cyclist	cyclist w TBI	percent cyclists w TBI	Pedestrians	pedestrians w TBI	percent pedestrians w TBI		
3	1999	40,965	18,326	2,254	615	326	53	4,545	1,773	39		
4	2000	41,994	18,649	2,704	572	304	53	4,598	1,761	38		
5	2001	42,443	19,270	2,976	585	294	50	4,822	1,819	38		
6	2002	44,065	21,344	3,153	550	280	51	5,041	1,803	36		
7	2003	43,340	20,720	3,616	572	279	49	4,951	1,824	37		
8	2004	43,432	19,965	3,940	637	312	49	4,839	1,654	34		
9	2005	43,667	19,125	4,296	700	365	52	4,917	1,724	35		
10	2006	43,664	18,277	4,703	688	339	49	5,021	1,791	36		
11	2007	42,031	16,560	4,889	578	241	42	4,820	1,625	34		
12	2008	37,985	13,677	5,037	582	243	42	4,489	1,517	34		
13	2009	34,485	12,349	4,214	529	244	46	4,109	1,439	35		
14												
15												
16												
17												
18												
19												
20												



Percentage of decedents with TBI, by type of unintentional MVT victim



Surveillance of deaths involving “Traumatic Brain Injury” (TBI)

TBI-related deaths are defined using the multiple causes.
Mention of any of the following:

S01 - open wound of the head;

S02.0, S02.1, S02.3, S02.7–S02.9 - fracture of the skull
and facial bones;

S04.0 - injury to optic nerve and pathways;

S06 - intracranial injury;

S07 - crushing injury of head;

S09.7–S09.9 - other and unspecified injuries of head;

T90.1, T90.2, T90.4, T90.5, T90.8, T90.9 - sequelae of
injuries of head

Surveillance of deaths involving “Traumatic Brain Injury” (TBI)

- What’s the distribution of TBI-related deaths (“any mention” of a TBI code) across injuries by intent?
- What age groups are at higher risk for TBI-related death?
- What states have an increased risk of TBI-related death?



WONDER

Request Form

Results

Multiple Cause of Death Data

Male

1. Organize table layout

Group Results By

And By

And By

And By

And By

Optional Measures

- Age Groups
- Autopsy
- Gender
- Hispanic Origin
- MCD - ICD Chapter
- MCD - ICD Sub-Chapter
- Multiple Cause of death
- MCD - ICD-10 113 Cause List
- MCD - ICD-10 130 Cause List (Infants)
- MCD - Drug/Alcohol Induced Causes
- Place of Death
- Race
- Region
- Division
- State
- County
- UCD - ICD Chapter
- UCD - ICD Sub-Chapter
- Underlying Cause of death
- UCD - ICD-10 113 Cause List
- UCD - ICD-10 130 Cause List (Infants)
- UCD - Injury Intent
- UCD - Injury Mechanism & All Other Leading Causes
- UCD - Drug/Alcohol Induced Causes
- Urbanization
- Weekday
- Year
- Month
- Year
- None
- None
- None
- None

(Check box to include in results.)

- Crude Rate Standard Error
- Crude Rate 95% Confidence Interval
- Percent of Total

Title

s A-Z

Contact Us

Search

1999-2009 Request

[How to Use WONDER](#)

Reset

button one time to send your request.

Send

Help

Note:

See the [Rate options](#) section below to choose standard or non-standard age-adjusted rates, or to adjust the number rates are calculated for.

6. Select underlying cause of death: Send Help

Click a button to select ICD codes by Chapters or by Groups.

- [UCD - ICD-10 Codes](#)
- [UCD - ICD-10 130 Cause List \(Infants\)](#)
- [UCD - Drug/Alcohol Induced Causes](#)
- [UCD - ICD-10 113 Cause List](#)
- [UCD - Injury Intent and Mechanism](#)

UCD - Injury Intent

- All Causes of Death
- Unintentional
- Suicide
- Homicide
- Indetermined
- Legal Intervention / Operations of War
- Non-Injury, no intent classified

UCD - Injury Mechanism & All Other Leading Causes

- All Causes of Death
- Cut/Pierce
- Drowning
- Fall
- Fire/Flame
- Hot object/Substance
- Firearm
- Machinery
- Motor Vehicle Traffic
- Other Pedal cyclist
- Other Pedestrian

All "injury" deaths

Hint: Use Ctrl + Click for multiple selections, or Shift + Click for a range.

7. Select multiple cause of death: Send Help

Click a button to select ICD codes by Chapters or by Groups.

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Items in the Select Records box will be used for your request.

Enter codes by hand, one per line, or find items in the Finder Tool and *Move (highlighted) Items Over.*

7. Select multiple cause of death:

[Send](#) [Help](#)

Click a button to select ICD codes by Chapters or by Groups.

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[Finder Tool Help](#)

Select Records

with any of these items:

- S01.0 (Open wound of
- S01.1 (Open wound of
- S01.2 (Open wound of
- S01.3 (Open wound of

[Clear](#)

AND any of these items:

Empty text box for additional records.

[Clear](#)

Leave box empty, or use *All*, to select all values.

Move Items Over
<<<

Move Items Over
<<<

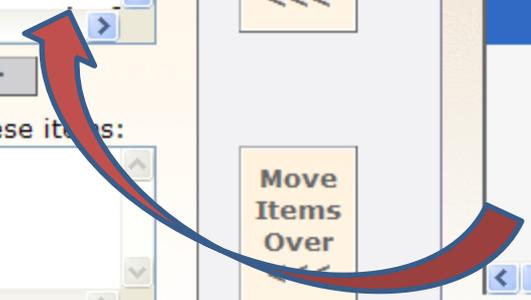
[Browse](#) [Search](#) [Details](#)

MCD - ICD-10 Codes

- 190.2 (Sequelae of fracture of skull and facial bone)
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- T91.4 (Sequelae of injury of intrathoracic organs)
- T91.5 (Sequelae of iniurv of intra-abdominal and pe

[Open](#) [Open Fully](#) [Close](#) [Close All](#)

Browse the list by opening and closing items.
Use Ctrl+Click to multiple select, Shift+Click for a range.



Multiple Cause of Death, 1999-2009 Results

Request Form

Results

Map

Chart

About

[Multiple Cause of Death Data](#)[Dataset Documentation](#)[Help for Results](#)[Printing Tips](#)[Help with Exports](#)

Export

Reset

Quick Options

More Options

Top

[Notes](#)[Citation](#)[Query Criteria](#)

Year ↓	→ Deaths ↑↓	↕ Population ↑↓	← Crude Rate Per 100,000 ↑↓
1999	49,979	279,040,168	17.9
2000	48,955	281,421,906	17.4
2001	51,020	285,317,572	17.9
2002	51,157	288,368,706	17.7
2003	51,322	290,810,789	17.6
2004	51,735	293,655,404	17.6
2005	53,425	296,410,404	18.0
2006	52,944	299,398,484	17.7
2007	53,256	301,621,157	17.7
2008	52,444	304,059,724	17.2
2009	51,178	307,006,550	16.7
Total	567,415	3,227,110,864	17.6

[Top](#) [Options](#)[Notes](#)[Citation](#)[Query Criteria](#)

Browser navigation bar with address: <http://wonder.cdc.gov/controller/datarequest/D77;jsessionid=19822E4E07D0F094C8242FDC47AB943D>

File Edit View Favorites Tools Help

Multiple Cause of Death, ... x iGoogle

6. Select underlying cause of death: Send Help

Click a button to select ICD codes by Chapters or by Groups.

- [UCD - ICD-10 Codes](#)
- [UCD - ICD-10 130 Cause List \(Infants\)](#)
- [UCD - Drug/Alcohol Induced Causes](#)
- [UCD - ICD-10 113 Cause List](#)
- [UCD - Injury Intent and Mechanism](#)

UCD - Injury Intent

- All Causes of Death
- Unintentional**
- Suicide
- Homicide
- Undetermined
- Legal Intervention / Operations of War
- Non-Injury, no intent classified



UCD - Injury Mechanism & All Other Leading Causes

- All Causes of Death
- Cut/Pierce
- Drowning
- Fall
- Fire/Flame
- Hot object/Substance
- Firearm
- Machinery
- Motor Vehicle Traffic
- Other Pedal cyclist
- Other Pedestrian

Hint: Use Ctrl + Click for multiple selections, or Shift + Click for a range.

7. Select multiple cause of death: Send Help

Click a button to select ICD codes by Chapters or by Groups.

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- [MCD - ICD-10 130 Cause List \(Infants\)](#)
- [MCD - ICD-10 113 Cause List](#)
- [MCD - Drug/Alcohol Induced Causes](#)

Items in the Select Records box will be used for your request.

Enter codes by hand, one per line, or find items in the Finder Tool and *Move (highlighted) Items Over.*

Multiple Cause of Death, 1999-2009 Results

Request Form

Results

Map

Chart

About

[Multiple Cause of Death Data](#)[Dataset Documentation](#)[Help for Results](#)[Printing Tips](#)[Help with Exports](#)

Export

Reset

Quick Options

More Options

Top

[Notes](#)[Citation](#)[Query Criteria](#)

Year ↓	→ Deaths ↑↓	↔ Population ↑↓	← Crude Rate Per 100,000 ↑↓
1999	29,748	279,040,168	10.7
2000	28,919	281,421,906	10.3
2001	30,229	285,317,572	10.6
2002	30,510	288,368,706	10.6
2003	30,546	290,810,789	10.5
2004	31,033	293,655,404	10.6
2005	32,329	296,410,404	10.9
2006	31,903	299,398,484	10.7
2007	31,581	301,621,157	10.5
2008	30,366	304,059,724	10.0
2009	28,997	307,006,550	9.4
Total	336,161	3,227,110,864	10.4

[Top](#) [Options](#)[Notes](#)[Citation](#)[Query Criteria](#)

Browser navigation bar showing address: <http://wonder.cdc.gov/controller/datarequest/D77;jsessionid=19822E4E07D0F094C8242FDC47AB943D>

Browser menu: File Edit View Favorites Tools Help

Browser tabs: Multiple Cause of Death, ... x iGoogle

Browser icons: Home, RSS, Mail, Print, Page, Safety, Tools

6. Select underlying cause of death: Send Help

Click a button to select ICD codes by Chapters or by Groups.

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- [UCD - Drug/Alcohol Induced Causes](#)
- [UCD - ICD-10 113 Cause List](#)
- [UCD - Injury Intent and Mechanism](#)

UCD - Injury Intent

- All Causes of Death
- Unintentional
- Suicide**
- Homicide
- Undetermined
- Legal Intervention / Operations of War
- Non-Injury, no intent classified

UCD - Injury Mechanism & All Other Leading Causes

- All Causes of Death
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- Fall
- Fire/Flame
- Hot object/Substance
- Firearm
- Machinery
- Motor Vehicle Traffic
- Other Pedal cyclist
- Other Pedestrian

Hint: Use Ctrl + Click for multiple selections, or Shift + Click for a range.

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Click a button to select ICD codes by Chapters or by Groups.

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- [MCD - ICD-10 113 Cause List](#)
- [MCD - Drug/Alcohol Induced Causes](#)

Items in the Select Records box will be used for your request.

Enter codes by hand, one per line, or find items in the Finder Tool and Move (highlighted) Items Over

File Home Insert Page Layout Formulas Data Review View Acrobat

Clipboard Font Alignment Number Styles Cells Editing

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Conditional Formatting Format as Table Cell Styles

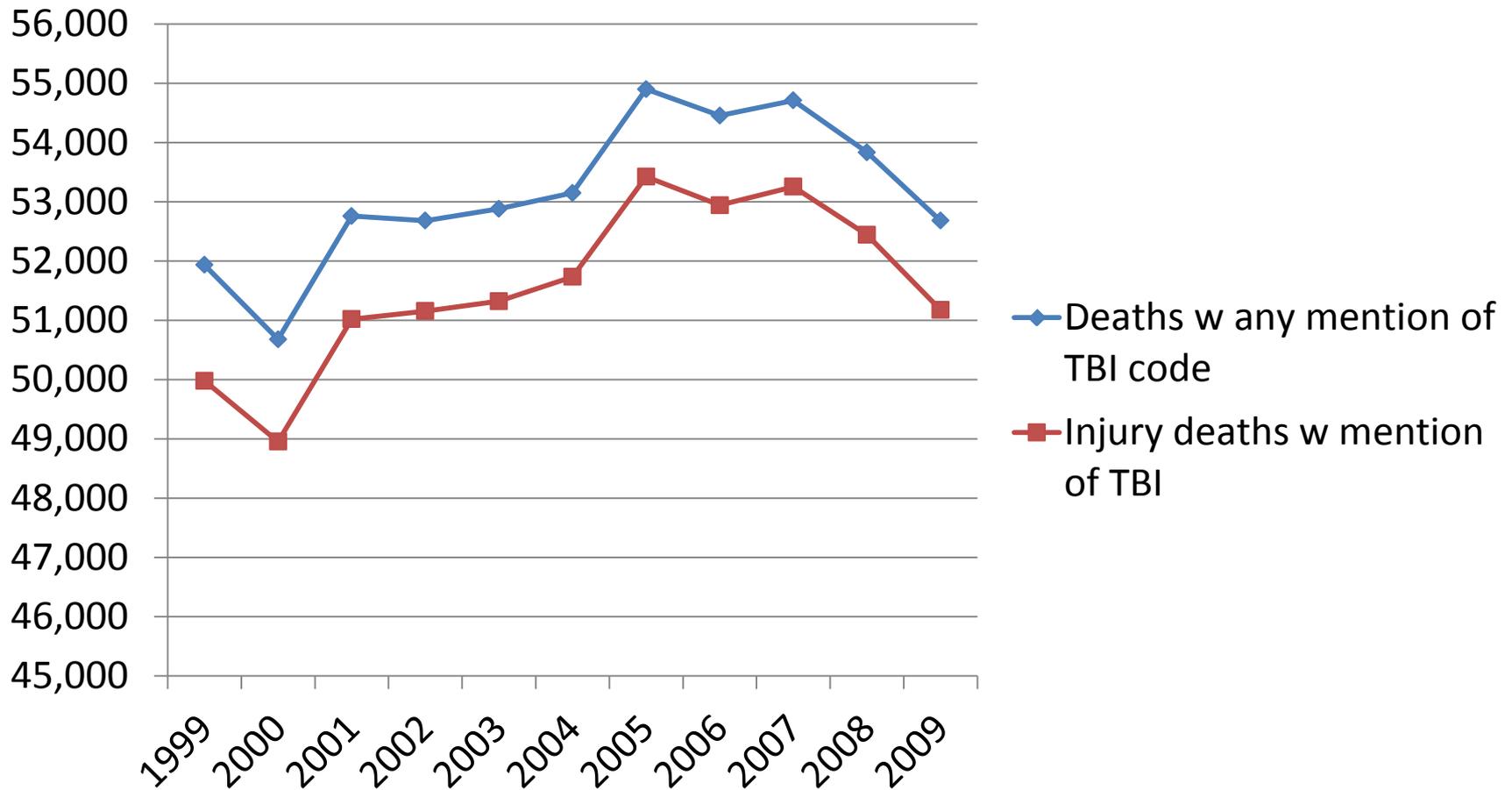
Insert Delete Format

Sort & Filter

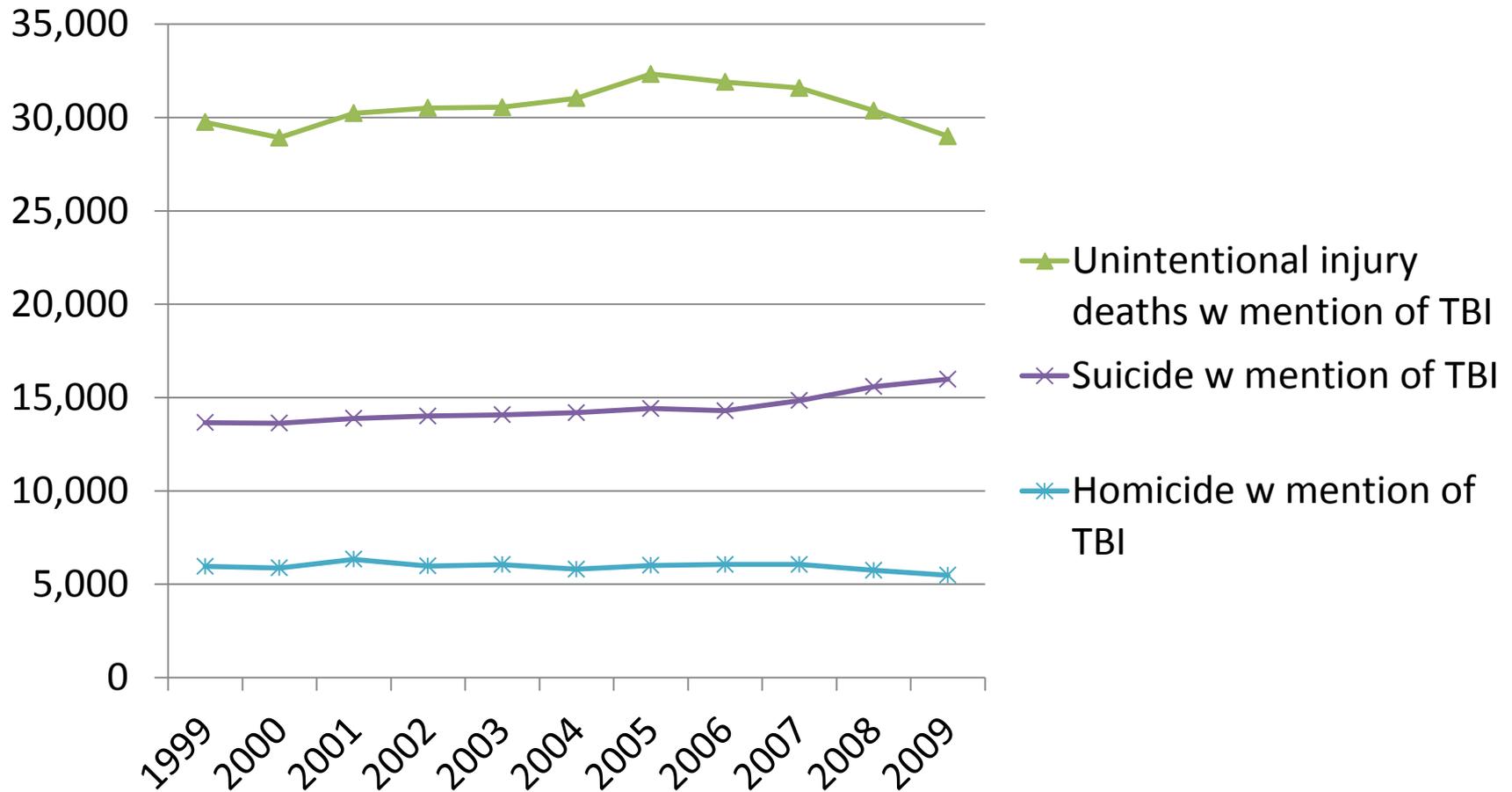
A1 fx

	A	B	C	D	E	F	G	H	I	J	K	L
3		Deaths w any mention of TBI code	Injury deaths w mention of TBI	Unintentional injury deaths w mention of TBI	Suicide w mention of TBI	Homicide w mention of TBI						
4	1999	51,937	49,979	29,748	13,657	5,954						
5	2000	50,680	48,955	28,919	13,624	5,870						
6	2001	52,760	51,020	30,229	13,881	6,333						
7	2002	52,683	51,157	30,510	14,008	5,981						
8	2003	52,883	51,322	30,546	14,078	6,055						
9	2004	53,150	51,735	31,033	14,189	5,802						
10	2005	54,902	53,425	32,329	14,412	6,008						
11	2006	54,454	52,944	31,903	14,293	6,057						
12	2007	54,710	53,256	31,581	14,835	6,063						
13	2008	53,835	52,444	30,366	15,586	5,743						
14	2009	52,682	51,178	28,997	15,984	5,488						
15												
16												
17												
		Crude rate any mention	Crude rate of injury deaths w mention of	Crude rate of unintentional injury deaths w mention of	Crude rate of suicide w mention of	Crude rate of homicide w mention of						

U.S. deaths with mention of at least one TBI code, 1999-2009



Injury deaths with mention of at least one TBI code, by intent, 1999-2009



Multiple Cause of Death, 1999-2009 Request

- Request Form
- Results
- Map
- Chart
- About

[Multiple Cause of Death Data](#) [Dataset Documentation](#) [Data Use Restrictions](#) [How to Use WONDER](#)

Reset

Make all desired selections and then click any **Send** button one time to send your request.

1. Organize table layout: Send Help

Group Results By Age Groups

And By None

And By None

And By None

And By None

Note:
See the [Rate options](#) section below to choose standard or non-standard age-adjusted rates, or to adjust the number rates are calculated for.

Optional Measures (Check box to include in results.)

Crude Rate Standard Error

Crude Rate 95% Confidence Interval

Percent of Total

Title

http://wonder.cdc.gov/controller/datarequest/D77;jsessionid=19822E4E07D0F094C8242FDC47AB943D

File Edit View Favorites Tools Help

Convert Select

Favorites Bus to New York City from ... megabus US - Home Metro - Rider Tools - Trip Pl...

Multiple Cause of Death, ... iGoogle

Page Safety Tools

Multiple Cause of Death, 1999-2009 Results

Request Form

Results

Map

Chart

About

[Multiple Cause of Death Data](#)[Dataset Documentation](#)[Help for Results](#)[Printing Tips](#)[Help with Exports](#)

Export

Reset

Quick Options

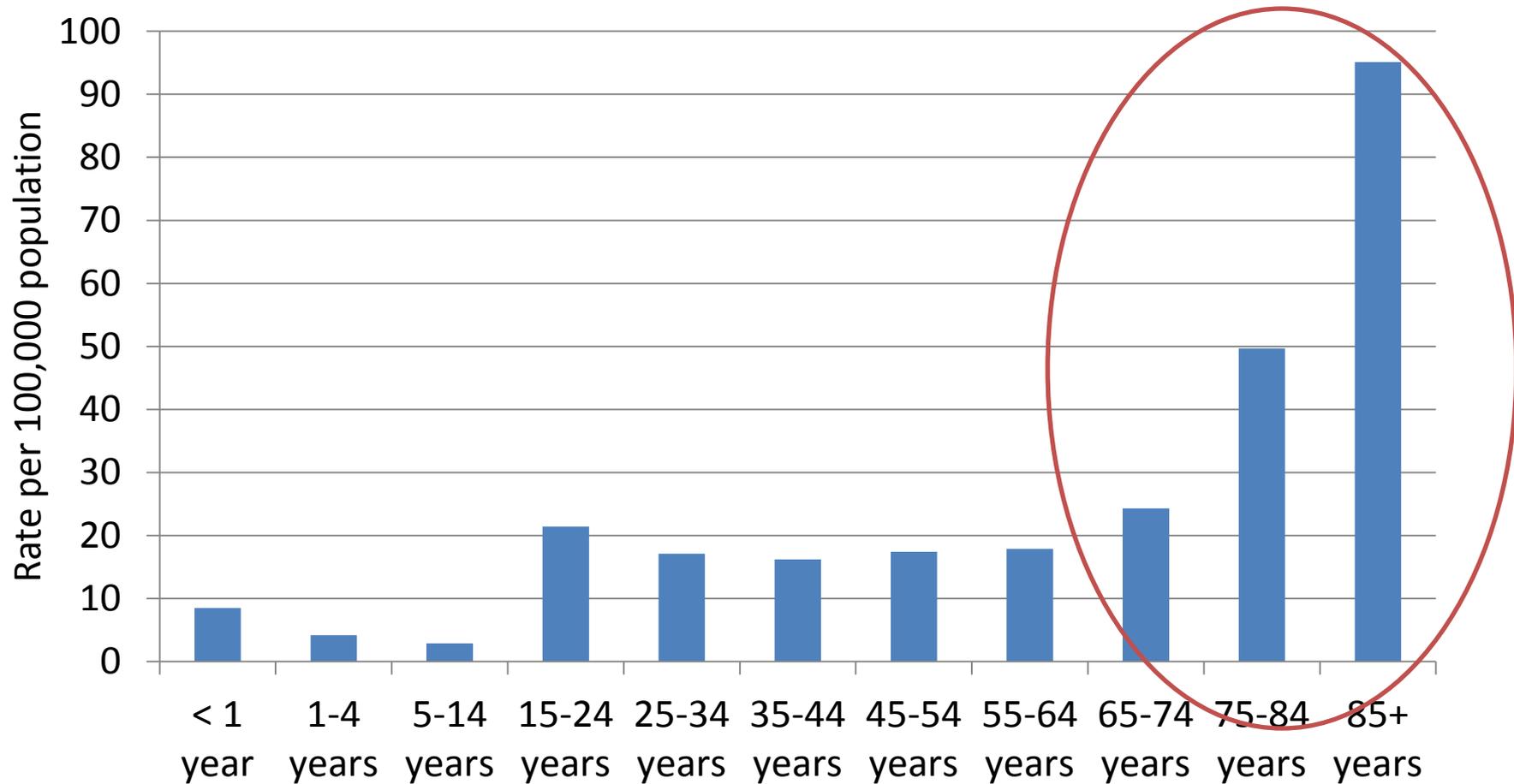
More Options

Top

[Notes](#)[Citation](#)[Query Criteria](#)

Ten-Year Age Groups ↓	→ Deaths ↑↓	↔ Population ↑↓	← Crude Rate Per 100,000 ↑↓
< 1 year	3,791	44,814,938	8.5
1-4 years	7,437	176,060,646	4.2
5-14 years	12,859	447,373,447	2.9
15-24 years	97,374	454,008,804	21.4
25-34 years	76,002	443,365,546	17.1
35-44 years	78,096	483,483,129	16.2
45-54 years	79,140	454,591,223	17.4
55-64 years	57,414	320,076,448	17.9
65-74 years	50,574	208,030,921	24.3
75-84 years	70,086	141,040,199	49.7
85+ years	51,631	54,265,563	95.1
Not Stated	272	Not Applicable	Not Applicable
Total	584,676	3,227,110,864	18.1

Death rates for decedents of all causes with any mention of TBI codes, by age, 1999-2009



Multiple Cause of Death, 1999-2009 Request

- Request Form
- Results
- Map
- Chart
- About

[Multiple Cause of Death Data](#) [Dataset Documentation](#) [Data Use Restrictions](#) [How to Use WONDER](#)

Reset

Make all desired selections and then click any **Send** button one time to send your request.

1. Organize table layout:

Send Help

Group Results By State

And By None

And By None

And By None

And By None

Note:
See the [Rate options](#) section below to choose standard or non-standard age-adjusted rates, or to adjust the number rates are calculated for.

Optional Measures (Check box to include in results.)

Crude Rate Standard Error

Crude Rate 95% Confidence Interval

Percent of Total

Title

WEB RESOURCES FOR INJURY-RELATED MORTALITY RESEARCH

CDC WONDER – “Wide-ranging Online Data for Epidemiologic Research”

The screenshot shows the CDC WONDER website in a browser window. The browser's address bar displays "CDC WONDER" and "iGoogle". The website's header features the CDC logo and navigation links for "CDC Home", "Search", and "Health Topics A-Z". Below the header, a secondary navigation bar includes "WONDER Home", "FAQ", "Help", "Contact Us", and "Search". A central text block states: "WONDER online databases utilize a rich ad-hoc query system for the analysis of public health data. Reports and other query systems are also available." Below this, there are tabs for "WONDER Systems", "Topics", and "A-Z Index". The main content area is organized into three columns of links:

- WONDER Online Databases**
 - ▶ [AIDS Public Use Data](#)
 - ▶ [Births](#)
 - ▶ [Cancer Statistics](#)
- Environment**
 - ▶ [Daily Air Temperatures](#)
 - ▶ [Daily Fine Particulate Matter](#)
- Mortality**
 - Underlying Cause of Death**
 - ▶ [Detailed Mortality](#)
 - ▶ [Compressed Mortality](#)
 - ▶ [Multiple cause of death \(Detailed Mortality\)](#)

On the right side of the main content area:

- Reports and References**
 - ▶ [Prevention Guidelines \(archive\)](#)
 - ▶ [Scientific Data and Documentation](#)
- Other Query Systems**
 - ▶ [Healthy People 2010](#)
 - ▶ [MMWR Morbidity Tables](#)
 - ▶ [MMWR Mortality Tables](#)

The left sidebar contains a search box and several informational links: "What is WONDER?", "Frequently Asked Questions", "Data Use Restrictions", "Data Collections", "Citations", "Republishing WONDER Data", and "What's New?".

<http://wonder.cdc.gov/>

CDC WISQARS – “Web-based Injury Statistics Query and Reporting System”

Injury Center

Recommend 104 Tweet 28 Share

Welcome to WISQARS™



WISQARS™ (Web-based Injury Statistics Query and Reporting System) is an interactive database system that provides customized reports of injury-related data. [Learn more about WISQARS™ >>](#)

NOTE TO USERS: The **Nonfatal Injury Reports** module has been updated with new national-level population estimates based on recently released bridged-race intercensal estimates of the July 1, 2001-July 1, 2009 and April 1, 2010 resident population of the United States. See [U.S. Census Populations With Bridged Race Categories](#). However, population estimates for the **Fatal Injury Reports and Violent Death (NVDRS) Reports** will not be updated until March or April of 2012 when state level bridged-race intercensal population estimates will be made available.

Fatal Injury Data	Nonfatal Injury Data	Violent Deaths (NVDRS)
Death certificate data from the <i>National Vital Statistics System</i> — deaths, death rates, and years of potential life lost (a measure of premature death) by specific causes of injury mortality and common causes of death.	National estimates of injuries treated in U.S. hospital emergency departments from the <i>National Electronic Injury Surveillance System - All Injury Program (NEISS-AIP)</i> — nonfatal injuries and nonfatal injury rates.	Data from the <i>National Violent Death Reporting System (NVDRS)</i> — violent incidents and deaths, death rates, and causes of injury mortality. Data provided for 16 states and are not nationally representative .

<http://www.cdc.gov/injury/wisqars/index.html>

NCHS' Injury Data and Resources Webpage

Injury Data and Resources

NCHS Home

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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

- [Drug Poisoning Deaths in the United States, 1980–2008 \(12/2011\)](#)
- [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](#)

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](#)

National Center for Health Statistics

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Injury Data

Contact Us:

- [Office of Analysis and Epidemiology](#)
National Center for Health Statistics
3311 Toledo Rd
Hyattsville, MD 20782
- 1 (800) 232-4636
- nchsinijury@cdc.gov

<http://www.cdc.gov/nchs/injury.htm>

WHO's ICD-10 Online

ICD-10 Version:2010

Search [? \[Advanced Search\]](#)

ICD-10

Info

ICD-10 Version:2010

- ▶ I Certain infectious and parasitic diseases
- ▶ II Neoplasms
- ▶ III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
- ▶ IV Endocrine, nutritional and metabolic diseases
- ▶ V Mental and behavioural disorders
- ▶ VI Diseases of the nervous system
- ▶ VII Diseases of the eye and adnexa
- ▶ VIII Diseases of the ear and mastoid process
- ▶ IX Diseases of the circulatory system
- ▶ X Diseases of the respiratory system
- ▶ XI Diseases of the digestive system
- ▶ XII Diseases of the skin and subcutaneous tissue
- ▶ XIII Diseases of the musculoskeletal system and connective tissue
- ▶ XIV Diseases of the genitourinary system
- ▶ XV Pregnancy, childbirth and the puerperium
- ▶ XVI Certain conditions originating in the perinatal period
- ▶ XVII Congenital malformations, deformations and chromosomal abnormalities
- ▶ XVIII Symptoms, signs and abnormal clinical and

International Statistical Classification of Diseases and Related Health Problems 10th Revision

You may browse the classification by using the hierarchy on the left or by using the search functionality

More information on how to use the online browser is available in the Help

<http://apps.who.int/classifications/icd10/browse/2010/en>

Thanks!

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