

# Central Health District Burden of Injury 2004-2008

## Highlights

### Injury Deaths<sup>a</sup> (2004-2008)

- Injury was the underlying cause of death for 526 Central District residents during this five year time period. There was an average of 105 injury deaths per year.
- The average annual injury death rate was 61.3 per 100,000 Central residents.
- Injury was the underlying cause for 6.3% of all deaths among Central residents.
- 74.9% of injury deaths were due to unintentional causes; 23.4% were due to intentional causes; 1.8% were coded as either undetermined intent or other.
- The three leading causes of injury deaths were motor vehicle injuries, unintentional poisoning, suicide.

### Injury Hospital Discharges<sup>b</sup>

- There were 6,028 hospital discharges of Central District residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 1,205 such discharges per year. 5.5% of hospital discharges were for an injury related cause.
- The average annual injury hospital discharge rate was 702.4 per 100,000 Central District residents. Central residents aged 65+ years were significantly more likely to have a hospital discharge than were residents in other age groups.
- The injury hospital discharge rate for females (759.5 per 100K) was higher than the rate for males (642.1 per 100K).
- 77.3% of injury hospital discharges were known to be due to unintentional causes; 14.3% were known to be due to intentional causes; 6% of injury cases were not coded for intent.
- The three leading causes of injury hospital discharges were unintentional fall, self inflicted poisoning, and motor vehicle traffic crash.

### Injury Outpatient Emergency Department Visits<sup>c</sup>

- There were 130,732 outpatient emergency department visits by Central District residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 26,146 visits per year.
- The average annual injury outpatient emergency department visit rate was 15,233.7 per 100,000 Central District residents. Teens and young adults ages 15-24 were significantly more likely to have an injury outpatient visit than were people in other age groups.
- The injury outpatient emergency department visit rate for males (16,961.1 per 100K) was significantly higher than the rate for females (13,597.6 per 100K).
- 84.2% of injury outpatient emergency department visits were known to be due to unintentional causes; 3% were known to be due to intentional causes; 12.3% of injury cases were not coded for intent.
- The three leading causes of injury outpatient emergency department visits were unintentional fall, stuck by/against, and overexertion.

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a Injury deaths defined as underlying cause of death coded as ICD-10 V01-Y36, Y85-Y87, Y89, U01-U03, Y40-Y59, Y60-Y84, or Y88

b Hospital discharge with injury principal diagnosis defined as principal diagnosis coded as ICD-9-CM 800-909.2, 909.4, 909.9-994.9, 995.5-995.59 or 995.80-995.85

c Outpatient emergency department visit with injury principal diagnosis defined as principal diagnosis coded as ICD-9-CM 800-909.2, 909.4, 909.9-994.9, 995.5-995.59 or 995.80-995.85, and discharge status coded as "Discharged to home or self care (routine discharge) or "Discharged/transferred to home under care of organized home health service organization".

## Five Leading Causes of Injury Deaths Central Health District, 2004-2008

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Motor Vehicle Traffic 136		Motor Vehicle Traffic 6	Motor Vehicle Traffic 32	Unintentional Poisoning 52	Suicide 45	Unintentional Fall 34		Suicide 91	Motor Vehicle Traffic 47
2	Suicide 108		Homicide 3	Unintentional Poisoning 10	Motor Vehicle Traffic 36	Unintentional Poisoning 36	Motor Vehicle Traffic 33		Motor Vehicle Traffic 89	Unintentional Poisoning 42
3	Unintentional Poisoning 104		Unintentional Suffocation 1		Suicide 10	Suicide 31	Motor Vehicle Traffic 29	Unintentional Unspecified 31		Unintentional Poisoning 62
4	Unintentional Fall 47		Undetermined Suffocation 1	Unintentional Drowning 4	Homicide 4	Unintentional Fall 10	Suicide 22		Unintentional Fall 26	Unintentional Unspecified 20
5	Unintentional Unspecified 34		Unintentional Fire/Hot Object 1	Homicide 3	Unintentional Pedestrian 3	Unintentional Drowning 6	Unintentional Suffocation 16		Unintentional Unspecified 14	Suicide 17

**Five Leading Causes of Injury Hospitalizations  
Central Health District, 2004-2008**

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Unintentional Fall 2,686	Unintentional Fall 57	Motor Vehicle Traffic 182	Self Injury 351	Unintentional Fall 421	Unintentional Fall 1,963	Unintentional Fall 935	Unintentional Fall 1,751
2	Self Injury 775	Motor Vehicle Traffic 30	Self Injury 149	Motor Vehicle Traffic 216	Self Injury 236	Motor Vehicle Traffic 109	Motor Vehicle Traffic 401	Self Injury 446
3	Motor Vehicle Traffic 709	Unintentional Poisoning 25	Unintentional Fall 61	Unintentional Fall 184	Motor Vehicle Traffic 172	Unintentional Unspecified 66	Self Injury 329	Motor Vehicle Traffic 308
4	Unintentional Poisoning 362	Transport, Other 25	Unintentional Poisoning 55	Unintentional Poisoning 104	Unintentional Poisoning 114	Unintentional Poisoning 64	Unintentional Poisoning 181	Unintentional Poisoning 181
5	Transport, Other 201	Unintentional Stuck By/Against 20	Transport, Other 45	Transport, Other 62	Transport, Other 50	Unintentional Overexertion 40	Transport, Other 133	Transport, Other 68

**Five Leading Causes of Emergency Department Visits  
Central Health District, 2004-2008**

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Unintentional Fall 30,055	Unintentional Fall 6,909	Unintentional Stuck By/Against 4,817	Unintentional Fall 7,087	Unintentional Fall 6,018	Unintentional Fall 5,721	Unintentional Fall 13,763	Unintentional Fall 16,292
2	Unintentional Struck By/Against 16,907	Unintentional Struck By/Against 4,971	Unintentional Fall 4,320	Unintentional Overexertion 5,765	Unintentional Overexertion 2,681	Unintentional Overexertion 803	Unintentional Struck By/Against 10,511	Unintentional Overexertion 7,179
3	Unintentional Overexertion 14,537	Unintentional Cut/Pierce 1,734	Unintentional Overexertion 3,581	Unintentional Stuck By/Against 4,277	Unintentional Cut/Pierce 2,392	Unintentional Cut/Pierce 772	Unintentional Cut/Pierce 7,658	Unintentional Struck By/Against 6,396
4	Unintentional Cut/Pierce 11,288	Unintentional Overexertion 1,707	Motor Vehicle Traffic 2,593	Unintentional Cut/Pierce 3,985	Unintentional Struck By/Against 2,103	Unintentional Struck By/Against 739	Unintentional Overexertion 7,358	Motor Vehicle Traffic 4,532
5	Motor Vehicle Traffic 8,141	Unintentional Natural/Envir 1,620	Unintentional Cut/Pierce 2,405	Unintentional Unspecified 2,496	Motor Vehicle Traffic 1,638	Unintentional Natural/Envir 681	Unintentional Other 4,043	Unintentional Cut/Pierce 3,630

**Maine Injury Prevention Program – Four Priority Injury Indicators**  
**Injury Deaths**  
**Central Health District, 2004-2008**

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Motor Vehicle Traffic 136	Motor Vehicle Traffic 6	Motor Vehicle Traffic 32	Unintentional Poisoning 52	Suicide 45	Unintentional Fall 34	Suicide 91	Unintentional Fall 47
Suicide 108		Unintentional Poisoning 10	Motor Vehicle Traffic 36	Unintentional Poisoning 36	Motor Vehicle Traffic 33	Motor Vehicle Traffic 89	Unintentional Poisoning 42
Unintentional Poisoning 104		Suicide 10	Suicide 31	Motor Vehicle Traffic 29	Suicide 22	Unintentional Poisoning 62	Unintentional Fall 21
Unintentional Fall 47		Unintentional Fall 1	Unintentional Fall 2	Unintentional Fall 10	Unintentional Poisoning 6	Unintentional Fall 26	Suicide 17

**Maine Injury Prevention Program – Four Priority Injury Indicators**  
**Injury Hospitalizations**  
**Central Health District, 2004-2008**

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 2,686	Unintentional Fall 57	Motor Vehicle Traffic 182	Self Injury 351	Unintentional Fall 421	Unintentional Fall 1,963	Unintentional Fall 935	Unintentional Fall 1,751
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Motor Vehicle Traffic 709	Unintentional Poisoning 25	Unintentional Fall 61	Unintentional Fall 184	Motor Vehicle Traffic 172	Unintentional Poisoning 64	Self Injury 329	Motor Vehicle Traffic 308
Unintentional Poisoning 362	Self Injury 12	Unintentional Poisoning 55	Unintentional Poisoning 104	Unintentional Poisoning 114	Self Injury 27	Unintentional Poisoning 181	Unintentional Poisoning 181

**Maine Injury Prevention Program – Four Priority Indicators  
Emergency Department Visits  
Central Health District, 2004-2008**

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 30,055	Unintentional Fall 6,909	Unintentional Fall 4,320	Unintentional Fall 7,087	Unintentional Fall 6,018	Unintentional Fall 5,721	Unintentional Fall 13,763	Unintentional Fall 16,292
Motor Vehicle Traffic 8,141	Motor Vehicle Traffic 499	Motor Vehicle Traffic 2,593	Motor Vehicle Traffic 2,924	Motor Vehicle Traffic 1,638	Motor Vehicle Traffic 487	Motor Vehicle Traffic 3,609	Motor Vehicle Traffic 4,532
Self Injury 1,069	Unintentional Poisoning 238	Self Injury 443	Self Injury 442	Unintentional Poisoning 126	Unintentional Poisoning 70	Self Injury 528	Self Injury 541
Unintentional Poisoning 685	Self Injury 62	Unintentional Poisoning 106	Unintentional Poisoning 145	Self Injury 118	Self Injury 4	Unintentional Poisoning 351	Unintentional Poisoning 334

## Data Sources

Deaths: 2004-2008 death certificate statistical datasets obtained from the Office of Data, Research and Vital Statistics, Maine analysis includes all deaths to Maine residents, regardless of the state where the death occurred.

Hospital Discharges: 2004-2008 hospital discharge (inpatient) datasets obtained from the Maine Health Data Organization. Analysis limited to discharge of Maine residents from Maine acute care hospitals (excludes psychiatric, rehabilitation and federal hospitals).

Outpatient ED Visits: 2004-2008 hospital outpatient datasets obtained from the Maine Health Data Organizations. Analysis limited to ED visits by Maine residents at Maine acute care hospitals (excludes psychiatric, rehabilitation and federal hospitals) where the person was discharged to home or self care

Population Estimates: Annual estimates of the resident population by age, sex, race and Hispanic origin for counties: April 1, 2000 to July 1, 2008.

## Injury Definitions

Unintentional Injury	Definition
Fall	When an individual sustains an injury after an unintentional descent from any height
Motor Vehicle	An incident involving a motorized vehicle and at least one injured individual, where that individual is a vehicle occupant, passenger or driver; a motorcyclist
Pedestrian	Injuries caused in transport and non-transport related crashes
Transport, Other	All transportation injuries not included in motor vehicle, pedestrian or bicycle injuries
Fire/Hot Substance	Severe exposure to flames, heat, chemicals or hot substance that leads to tissue damage of the skin or places deeper in the body; injury from smoke inhalation to the upper airway, lower airway or lungs
Firearm	Penetrating force injury resulting from a bullet or other projectile shot from a powder charged gun (handgun, shotgun, unspecified firearm)
Poisoning	Ingestion, inhalation, absorption through the skin, or injection of so much of a drug, toxin, or other chemical that a harmful effect results. This category does not include harmful effects from normal therapeutic drugs or bacterial illnesses.
Suffocation	Inhalation, aspiration or ingestion of food or other object that blocks the airway or causes suffocation; intentional or accidental mechanical suffocation caused by hanging, strangulation, lack of air in a closed place, plastic bag, or falling earth. This category does not include injury resulting from a foreign body that does not block the airway.
Natural/Environmental Causes	Injury resulting from exposure to adverse natural and environmental conditions, i.e. severe heat, severe cold, lightning, sunstroke, tornadoes and natural disasters as well as lack of food or water
Struck By/Against	Injury resulting from being struck by (i.e. hit) or crushed by a human, animal, or inanimate object or force other than a vehicle or machinery; injury caused by striking (i.e. hitting) against a human, animal or inanimate object or force other than a vehicle or machinery
Cutting/Piercing	Injury resulting from an incision, slash, perforation or puncture by a pointed or sharp instrument, weapon or object
Overexertion	Injury resulting from excessive physical exercise (i.e. lifting, pulling, pushing). Strenuous movements in recreational and other activities
Drowning	Suffocation resulting from submersion in water or other liquid
Late effects	Late effect or sequela resulting from a previous injury or poisoning
Unspecified	Information missing on mechanism (i.e. motor vehicle, firearm, hanging) of the injury
Other	Injury associated with any other specified cause that does not fit another category

<b>Intentional Injury</b>	<b>Definition</b>
Abuse and Neglect	Injury resulting from abuse or criminal neglect
Physical Force	Injury resulting from fight, brawl, rape, includes beating with hands, fists, feet
Cutting/Piercing	Injury resulting from an incision, a slash, a perforation, or a puncture by a pointed or sharp instrument, weapon or object
Firearm	Penetrating force injury resulting from a bullet or other projectile shot from a powder charged gun (handgun, shotgun, military firearm, unspecified firearm)
Homicide	All fatal injuries purposely inflicted by other persons, excluding legal intervention by law enforcement agents
Struck	Injury resulting from striking by blunt or thrown object
Other	Injury associated with any other specified cause that does not fit another category
<b>Self Injury</b>	<b>Definition</b>
Drug and Medicinal Substances	Injury resulting from poisoning by drug and medicinal substances (i.e. analgesics, barbiturates, tranquilizers, etc)
Cutting/Piercing	Injury resulting from cutting, piercing instrument
Firearm	Penetrating force injury resulting from bullet or other projectile shot from a powder charged gun
Jump	Injury resulting from jumping from high places
Hang	Mechanical suffocation caused by hanging or strangulation or physical constriction of the neck, resulting in air loss
Suicide	Self-inflicted death with evidence (implicit or explicit) of the intent to die
Other	Injury associated with any other specified cause that does not fit another category
<b>Undetermined Intent</b>	<b>Definition</b>
Poisoning	Injury resulting from poisoning by solid or liquid substance, including drugs and medicinal substances but undetermined whether unintentionally or intentionally inflicted
Unspecified	Information missing on mechanism (i.e., motor vehicle, firearm, hanging) of the injury