

Central Health District (Somerset and Kennebec Counties)
Burden of Injury
2005-2009

Highlights

Injury Deaths^a

- Injury was the underlying cause of death for 536 residents during this five year time period. There was an average of 107 injury deaths per year.
- The average annual injury death rate was 62.1 per 100,000 Central Health District residents.
- Injury was the underlying cause for 6.4% of all deaths among Central Health District residents.
- 75.6% of injury deaths were due to unintentional causes; 22.6% were due to intentional causes; 1.8% were coded as either undetermined intent or other.
- The three leading causes of injury deaths were unintentional motor vehicle traffic, suicide and unintentional poisoning.

Injury Hospital Discharges^b

- There were 5,980 hospital discharges of Central Health District residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 1,196 such discharges per year. 5.5% of hospital discharges were for an injury related cause.
- The average annual injury hospital discharge rate was 693.1 per 100,000 Central Health District residents. Central Health District 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 (752.5 per 100K) was significantly higher than the rate for males (630.5 per 100K).
- 79.1% of injury hospital discharges were known to be due to unintentional causes; 14.4% were known to be due to intentional causes; 6.5% of injury cases were coded as undetermined, other, or missing intent.
- The three leading causes of injury hospital discharges were unintentional fall, intentional self injury and unintentional motor vehicle traffic.

Injury Outpatient Emergency Department Visits^c

- There were 129,418 outpatient emergency department visits for which an injury was the principal diagnosis during this 5 year period. There was an average of 25,883 visits per year. 25.6% of outpatient emergency department visits were for an injury related cause.
- The average annual injury outpatient emergency department visit rate was 14,499.1 per 100,000 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 (16,613.0 per 100K) was significantly higher than the rate for females (13,466.2 per 100K).
- 86.7% of injury outpatient emergency department visits were known to be due to unintentional causes; 3.1% were known to be due to intentional causes; 10.2% of injury cases were coded as undetermined, other, or missing intent.
- The three leading causes of injury outpatient emergency department visits were unintentional fall, unintentional struck by/against and unintentional overexertion.

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, 20052009**

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Unintentional Motor vehicle traffic 145		Unintentional Motor vehicle traffic 4	Unintentional Motor vehicle traffic 32	Unintentional Poisoning 45	Suicide 43	Unintentional Fall 38		Unintentional Motor vehicle traffic 96	Unintentional Motor vehicle traffic 49
2	Suicide 107		Unintentional Pedestrian 2	Suicide 9	Unintentional Motor vehicle traffic 38	Unintentional Poisoning 36	Unintentional Motor vehicle traffic 37		Suicide 89	Unintentional Poisoning 37
3	Unintentional Poisoning 97		Unintentional Suffocation 2	Unintentional Poisoning 8	Suicide 32	Unintentional Motor vehicle traffic 34	Unintentional Unspecified 35		Unintentional Poisoning 60	Unintentional Fall 24
4	Unintentional Fall 50		Suicide 1	Unintentional Drowning 3	Homicide 3	Unintentional Fall 9	Suicide 22		Unintentional Fall 26	Unintentional Unspecified 23
5	Unintentional Unspecified 39		Homicide 1		Unintentional Fall 2	Unintentional Drowning 6	Unintentional Poisoning 8		Unintentional Unspecified 16	Suicide 18

**Five Leading Causes of Injury Hospitalizations
Central Health District, 2005-2009**

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Unintentional Fall 2,807		Unintentional Fall 48	Unintentional Motor vehicle traffic 164	Intentional Self Injury 351	Unintentional Fall 454	Unintentional Fall 2,053		Unintentional Fall 987	Unintentional Fall 1,820
2	Intentional Self Injury 779		Unintentional Motor vehicle traffic 30	Intentional Self Injury 145	Unintentional Motor vehicle traffic 205	Intentional Self Injury 247	Unintentional Motor vehicle traffic 113		Unintentional Motor vehicle traffic 392	Intentional Self Injury 456
3	Unintentional Motor vehicle traffic 698		Unintentional Poisoning 28	Unintentional Fall 58	Unintentional Fall 194	Unintentional Motor vehicle traffic 186	Unintentional Poisoning 67		Intentional Self Injury 323	Unintentional Motor vehicle traffic 306
4	Unintentional Poisoning 360		Unintentional Transport, Other 19	Unintentional Poisoning 44	Unintentional Poisoning 105	Unintentional Poisoning 116	Unintentional Unspecified 62		Unintentional Poisoning 179	Unintentional Poisoning 181
5	Unintentional Transport, Other 184		Unintentional Pedal Cyclist 17	Unintentional Transport, Other 42	Unintentional Transport, Other 56	Unintentional Transport, Other 49	Unintentional Overexertion 41		Unintentional Transport, Other 123	Unintentional Transport, Other 61

**Five Leading Causes of Injury Emergency Department Visits
Central Health District, 2005-2009**

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Unintentional Fall 30,969		Unintentional Fall 6,855	Unintentional Struck by/against 4,857	Unintentional Fall 7,270	Unintentional Fall 6,404	Unintentional Fall 6,168		Unintentional Fall 14,060	Unintentional Fall 16,909
2	Unintentional Struck by/against 17,131		Unintentional Struck by/against 5,033	Unintentional Fall 4,272	Unintentional Overexertion 5,759	Unintentional Overexertion 2,844	Unintentional Overexertion 834		Unintentional Struck by/against 10,596	Unintentional Overexertion 7,250
3	Unintentional Overexertion 14,546		Unintentional Overexertion 1,725	Unintentional Overexertion 3,384	Unintentional Struck by/against 4,265	Unintentional Cut/pierce 2,479	Unintentional Unspecified 809		Unintentional Cut/pierce 7,685	Unintentional Struck by/against 6,535
4	Unintentional Cut/pierce 11,314		Unintentional Cut/pierce 1,710	Unintentional MV Traffic 2,542	Unintentional Cut/pierce 3,961	Unintentional Struck by/against 2,183	Unintentional Struck by/against 793		Unintentional Overexertion 7,296	Unintentional MV Traffic 4,478
5	Unintentional Motor vehicle traffic 8,087		Unintentional Natural/ Environmental 1,656	Unintentional Cut/pierce 2,373	Unintentional MV Traffic 2,920	Unintentional MV Traffic 1,632	Unintentional Cut/pierce 791		Unintentional Other specified 4,085	Unintentional Unspecified 3,964

**Maine Injury Prevention Program – Four Priority Injury Indicators
Injury Deaths
Central Health District, 2005-2009**

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Motor vehicle traffic 145	Unintentional Motor vehicle traffic 4	Unintentional Motor vehicle traffic 32	Unintentional Poisoning 45	Suicide 43	Unintentional Fall 38	Unintentional Motor vehicle traffic 96	Unintentional Motor vehicle traffic 49
Suicide 107	Suicide 1	Suicide 9	Unintentional Motor vehicle traffic 38	Unintentional Poisoning 36	Unintentional Motor vehicle traffic 37	Suicide 89	Unintentional Poisoning 37
Unintentional Poisoning 97		Unintentional Poisoning 8	Suicide 32	Unintentional Motor vehicle traffic 34	Suicide 22	Unintentional Poisoning 60	Unintentional Fall 24
Unintentional Fall 50		Unintentional Fall 1	Unintentional Fall 2	Unintentional Fall 9	Unintentional Poisoning 8	Unintentional Fall 26	Suicide 18

**Maine Injury Prevention Program – Four Priority Injury Indicators
Injury Hospitalizations
Central Health District, 2005-2009**

Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
Unintentional Fall 2,807		Unintentional Fall 48	Unintentional Motor vehicle traffic 164	Intentional Self Injury 351	Unintentional Fall 454	Unintentional Fall 2,053		Unintentional Fall 987	Unintentional Fall 1,820
Intentional Self Injury 779		Unintentional Motor vehicle traffic 30	Intentional Self Injury 145	Unintentional Motor vehicle traffic 205	Intentional Self Injury 247	Unintentional Motor vehicle traffic 113		Unintentional Motor vehicle traffic 392	Intentional Self Injury 456
Unintentional Motor vehicle traffic 698		Unintentional Poisoning 28	Unintentional Fall 58	Unintentional Fall 194	Unintentional Motor vehicle traffic 186	Unintentional Poisoning 67		Intentional Self Injury 323	Unintentional Motor vehicle traffic 306
Unintentional Poisoning 360			Unintentional Poisoning 42	Unintentional Poisoning 105	Unintentional Poisoning 116	Intentional Self Injury 26		Unintentional Poisoning 179	Unintentional Poisoning 181

**Maine Injury Prevention Program – Four Priority Injury Indicators
Injury Emergency Department Visits
Central Health District, 2005-2009**

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 30,969	Unintentional Fall 6,855	Unintentional Fall 4,272	Unintentional Fall 7,270	Unintentional Fall 6,404	Unintentional Fall 6,168	Unintentional Fall 14,060	Unintentional Fall 16,909
Unintentional Motor vehicle traffic 8,087	Unintentional Motor vehicle traffic 480	Unintentional Motor vehicle traffic 2,542	Unintentional Motor vehicle traffic 2,920	Unintentional Motor vehicle traffic 1,632	Unintentional Motor vehicle traffic 513	Unintentional Motor vehicle traffic 3,609	Unintentional Motor vehicle traffic 4,478
Intentional Self Injury 1,086	Unintentional Poisoning 230	Intentional Self Injury 438	Intentional Self Injury 457	Unintentional Poisoning 146	Unintentional Poisoning 86	Intentional Self Injury 555	Intentional Self Injury 531
Unintentional Poisoning 715	Intentional Self Injury 64	Unintentional Poisoning 102	Unintentional Poisoning 151	Intentional Self Injury 122	Intentional Self Injury 5	Unintentional Poisoning 364	Unintentional Poisoning 351

Data Sources

Deaths: 2005-2009 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: 2005-2009 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: 2005-2009 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, 2009.

Injury Definitions

Unintentional Injury	Definition
Fall	When an individual sustains an injury after an unintentional descent from any height
Motor vehicle traffic	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 traffic, 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 traffic, firearm, hanging) of the injury
Other	Injury associated with any other specified cause that does not fit another category
Intentional Injury	Definition
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
Self Injury	Definition
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	All fatal injuries which are self inflicted
Other	Injury associated with any other specified cause that does not fit another category
Undetermined Intent	Definition
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 traffic, firearm, hanging) of the injury

