

Penquis Health District (Penobscot and Piscataquis Counties)
Burden of Injury
2005-2009

Highlights

Injury Deaths^a

- Injury was the underlying cause of death for 525 residents during this five year time period. There was an average of 105 injury deaths per year.
- The average annual injury death rate was 63.5 per 100,000 Penquis Health District residents.
- Injury was the underlying cause for 6.5% of all deaths among Penquis Health District residents.
- 71.4% of injury deaths were due to unintentional causes; 23.6% were due to intentional causes; 5.0% were coded as either undetermined intent or other.
- The three leading causes of injury deaths were suicide, unintentional poisoning, and unintentional motor vehicle traffic.

Injury Hospital Discharges^b

- There were 5,419 hospital discharges of Penquis Health District residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 1,083 such discharges per year. 5.3% of hospital discharges were for an injury related cause.
- The average annual injury hospital discharge rate was 655.0 per 100,000 Penquis Health District residents. Penquis 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 (706.8 per 100K) was higher than the rate for males (601.1 per 100K).
- 77.7% of injury hospital discharges were known to be due to unintentional causes; 9.1% were known to be due to intentional causes; 13.3% of injury cases were coded undetermined, other or missing intent.
- The three leading causes of injury hospital discharges were unintentional fall, unintentional motor vehicle traffic and intentional self injury.

Injury Outpatient Emergency Department Visits^c

- There were 92,605 outpatient emergency department visits for which an injury was the principal diagnosis during this 5 year period. There was an average of 18,521 visits per year. 25.0% of outpatient emergency department visits were for an injury related cause.
- The average annual injury outpatient emergency department visit rate was 11,193.7 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 (12,358.1 per 100K) was significantly higher than the rate for females (10,075.6 per 100K).
- 69.0% of injury outpatient emergency department visits were known to be due to unintentional causes; 2.8% were known to be due to intentional causes; 28.2% 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
Penquis Health District, 2005-2009**

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Suicide 124		Unintentional Drowning 3	Unintentional Motor Vehicle Traffic 18	Unintentional Poisoning 60	Suicide 42	Unintentional Fall 39		Suicide 103	Unintentional Poisoning 32
2	Unintentional Poisoning 108		Unintentional Suffocation 2	Unintentional Poisoning 11	Suicide 43	Unintentional Poisoning 30	Unintentional Unspecified 38		Unintentional Poisoning 76	Unintentional Unspecified 30
3	Unintentional Motor Vehicle Traffic 87		Unintentional Motor Vehicle Traffic 1	Suicide 11	Unintentional Motor Vehicle Traffic 25	Unintentional Motor Vehicle Traffic 25	Suicide 28		Unintentional Motor Vehicle Traffic 59	Unintentional Motor Vehicle Traffic 28
4	Unintentional Fall 51			Unintentional Poisoning 1	Homicide 4	Unintentional Drowning 4	Unintentional Fall 9	Unintentional Suffocation 22	Unintentional Fall 26	Unintentional Fall 25
5	Unintentional Unspecified 40			Unintentional Fire/Hot Object 1	Unintentional Fall 3	Unintentional Suffocation 4	Unintentional Suffocation 4	Unintentional Motor Vehicle Traffic 18	Unintentional Suffocation 18	Suicide 21

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

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Unintentional Fall 2,501		Unintentional Fall 85	Unintentional Motor Vehicle Traffic 124	Unintentional Fall 228	Unintentional Fall 528	Unintentional Fall 1,583		Unintentional Fall 4892	Unintentional Fall 1,609
2	Unintentional Motor Vehicle Traffic 527		Unintentional Poisoning 36	Intentional Self Injury 97	Intentional Self Injury 198	Unintentional Motor Vehicle Traffic 140	Unintentional Motor Vehicle Traffic 72		Unintentional Motor Vehicle Traffic 314	Intentional Self Injury 268
3	Intentional Self Injury 427		Unintentional Struck By/Against 25	Unintentional Fall 77	Unintentional Motor Vehicle Traffic 182	Intentional Self Injury 116	Unintentional Poisoning 68		Unintentional Poisoning 163	Unintentional Motor Vehicle Traffic 213
4	Unintentional Poisoning 316		Unintentional Transport, Other 23	Unintentional Poisoning 43	Unintentional Poisoning 74	Unintentional Poisoning 95	Unintentional Unspecified 47		Intentional Self Injury 159	Unintentional Poisoning 153
5	Unintentional Transport, Other 170		Unintentional Other Specified 12	Unintentional Transport, Other 31	Unintentional Transport, Other 49	Unintentional Transport, Other 44	Unintentional Struck By/Against 38		Unintentional Transport, Other 122	Unintentional Overexertion 55

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

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Unintentional Fall 17,737		Unintentional Fall 3,165	Unintentional Struck by/against 3,036	Unintentional Fall 4,006	Unintentional Fall 4,053	Unintentional Fall 3,916		Unintentional Fall 7,999	Unintentional Fall 9,738
2	Unintentional Struck by/against 10,172		Unintentional Struck by/against 2,543	Unintentional Fall 2,597	Unintentional Overexertion 3,466	Unintentional Overexertion 1,912	Unintentional Overexertion 589		Unintentional Struck by/against 6,364	Unintentional Overexertion 4,531
3	Unintentional Overexertion 8,869		Unintentional Cut/pierce 866	Unintentional Overexertion 2,146	Unintentional Struck by/against 2,650	Unintentional Cut/pierce 1,570	Unintentional Struck by/against 562		Unintentional Cut/pierce 4,639	Unintentional Struck by/against 3,808
4	Unintentional Cut/pierce 6,719		Unintentional Overexertion 756	Unintentional Motor Vehicle Traffic 1,632	Unintentional Cut/pierce 2,312	Unintentional Struck by/against 1,381	Unintentional Cut/pierce 473		Unintentional Overexertion 4,338	Unintentional Motor Vehicle Traffic 2,638
5	Unintentional Motor Vehicle Traffic 4,877		Unintentional Other, specified 719	Unintentional Cut/pierce 1,498	Unintentional Motor Vehicle Traffic 1,668	Unintentional Motor Vehicle Traffic 1,004	Unintentional Unspecified 455		Unintentional Other, specified 2,339	Unintentional Cut/pierce 2,080

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

Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
Suicide 124		Unintentional Motor Vehicle Traffic 1	Unintentional Motor Vehicle Traffic 18	Unintentional Poisoning 60	Suicide 42	Unintentional Fall 39		Suicide 103	Unintentional Poisoning 32
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Unintentional Motor Vehicle Traffic 87			Suicide 11	Unintentional Motor Vehicle Traffic 25	Unintentional Motor Vehicle Traffic 25	Unintentional Motor Vehicle Traffic 18		Unintentional Motor Vehicle Traffic 59	Unintentional Fall 25
Unintentional Fall 51			Unintentional Fall 3		Unintentional Fall 9	Unintentional Poisoning 6		Unintentional Fall 26	Suicide 21

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

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

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Unintentional Fall 17,737	Unintentional Fall 3,165	Unintentional Fall 2,597	Unintentional Fall 4,006	Unintentional Fall 4,053	Unintentional Fall 3,916	Unintentional Fall 7,999	Unintentional Fall 9,738
Unintentional Motor vehicle traffic 4,877	Unintentional Motor vehicle traffic 250	Unintentional Motor vehicle traffic 1,632	Unintentional Motor vehicle traffic 1,668	Unintentional Motor vehicle traffic 1,004	Unintentional Motor vehicle traffic 323	Unintentional Motor vehicle traffic 2,339	Unintentional Motor vehicle traffic 2,638
Intentional Self Injury 644	Unintentional Poison 149	Intentional Self Injury 308	Intentional Self Injury 221	Unintentional Poison 135	Unintentional Poison 49	Intentional Self Injury 296	Intentional Self Injury 348
Unintentional Poison 619	Intentional Self Injury 30	Unintentional Poison 125	Unintentional Poison 221	Intentional Self Injury 81	Intentional Self Injury 4	Unintentional Poison 284	Unintentional Poison 335

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	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
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, firearm, hanging) of the injury

