

Downeast Health District Burden of Injury 2004-2008

Highlights

Injury Deaths^a

- Injury was the underlying cause of death for 311 Downeast district residents during this five year time period. There was an average of 62 injury deaths per year.
- The average annual injury death rate was 72.4 per 100,000 Downeast residents.
- Injury was the underlying cause for 6.3% of all deaths among Downeast residents.
- 76.5% of injury deaths were due to unintentional causes; 19.3% were due to intentional causes; 4.2% were coded as either undetermined intent or other.
- The three leading causes of injury deaths were motor vehicle traffic injuries, suicide and unintentional poisoning.

Injury Hospital Discharges^b

- There were 3,136 hospital discharges of Downeast residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 627 such discharges per year. 5.5% of hospital discharges were for an injury related cause.
- The average annual injury hospital discharge rate was 730 per 100,000 Downeast residents. Downeast 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 (792.4 per 100K) was higher than the rate for males (655 per 100K).
- 76.5% of injury hospital discharges were known to be due to unintentional causes; 8.6% were known to be due to intentional causes. 11.9% of cases were not coded for injury intent.
- The three leading causes of injury hospital discharges were unintentional fall, motor vehicle traffic crash, and self inflicted poisoning.

Injury Outpatient Emergency Department Visits^c

- There were 55,500 outpatient emergency department visits by Downeast residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 555 visits per year. 25.8% of outpatient emergency department visits were for an injury related cause.
- The average annual injury outpatient emergency department visit rate was 12,919.2 per 100,000 Downeast 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 (14,054.5 per 100K) was significantly higher than the rate for females (11,826.6 per 100K).
- 75.5% of injury outpatient emergency department visits were known to be due to unintentional causes; 1.8% were known to be due to intentional causes; 21.9% of cases were not coded for injury intent.
- The three leading causes of injury outpatient emergency department visits were unintentional fall, overexertion, and struck by/against.

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 Downeast 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 87		Homicide 2	Motor Vehicle Traffic 16	Motor Vehicle Traffic 30	Motor Vehicle Traffic 24	Unintentional Fall 27		Motor Vehicle Traffic 62	Motor Vehicle Traffic 25
2	Suicide 52		Unintentional Drowning 1 Motor Vehicle Traffic 1	Unintentional Poisoning 10	Unintentional Poisoning 22	Suicide 20	Unintentional Unspecified 26		Suicide 43	Unintentional Unspecified 19
3	Unintentional Poisoning 46			Suicide 4	Suicide 15	Unintentional Poisoning 12	Motor Vehicle Traffic 16		Unintentional Poisoning 33	Unintentional Fall 13
4	Unintentional Fall 39			Unintentional Poisoning 1	Unintentional Drowning 2	Unintentional Fall 3	Unintentional fall 9	Suicide 13	Unintentional Fall 26	Unintentional Poisoning 13
5	Unintentional Unspecified 28			Unintentional Other 1 Transport, Other 1 Undetermined Suffocation 1	Homicide 3	Unintentional Nat/Envir 3	Unintentional Suffocation 8		Unintentional Unspecified 9	Suicide 9

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

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Unintentional Fall 1,461	Unintentional Fall 42	Motor Vehicle Traffic 101	Self Injury 115	Unintentional Fall 258	Unintentional Fall 1,036	Unintentional Fall 509	Unintentional Fall 952
2	Motor Vehicle Traffic 386	Motor Vehicle Traffic 14	Self Injury 46	Motor Vehicle Traffic 102	Motor Vehicle Traffic 93	Motor Vehicle Traffic 76	Motor Vehicle Traffic 254	Self Injury 146
3	Self Injury 232	Unintentional Poisoning 12	Unintentional Fall 27	Unintentional Fall 98	Self Injury 61	Other, Adverse Effects 37	Self Injury 86	Motor Vehicle Traffic 132
4	Unintentional Poisoning 101	Transport Other 10	Transport, Other 21	Unintentional Poisoning 25	Unintentional Poisoning 28	Unintentional Overexertion 29	Transport, Other 60	Unintentional Poisoning 49
5	Transport Other 90	Unintentional Stuck By/Against 9	Unintentional Poisoning 13	Transport, Other 23	Transport, Other 20	Unintentional Unspecified 27	Unintentional Poisoning 52	Unintentional Overexertion 36

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

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Unintentional Fall 11,299	Unintentional Fall 2,333	Unintentional Struck By/Against 1,579	Unintentional Overexertion 2,248	Unintentional Fall 2,370	Unintentional Fall 3,090	Unintentional Fall 5,009	Unintentional Fall 6,289
2	Unintentional Overexertion 6,144	Unintentional Struck By/Against 1,704	Unintentional Overexertion 1,369	Unintentional Fall 2,151	Unintentional Overexertion 1,242	Unintentional Overexertion 525	Unintentional Struck By/Against 3,718	Unintentional Overexertion 3,112
3	Unintentional Struck By/Against 6,055	Unintentional Overexertion 760	Unintentional Fall 1,355	Unintentional Struck By/Against 1,488	Unintentional Unintentional Cut/Pierce 1,116	Unintentional Struck By/Against 414	Unintentional Cut/Pierce 3,092	Unintentional Struck By/Against 2,347
4	Unintentional Cut/Pierce 4,663	Unintentional Cut/Pierce 624	Motor Vehicle Traffic 1,151	Unintentional Cut/Pierce 1,486	Unintentional Struck By/Against 880	Unintentional Cut/Pierce 388	Unintentional Overexertion 3,031	Motor Vehicle Traffic 1,761
5	Motor Vehicle Traffic 3,312	Unintentional Natural/Evir 554	Unintentional Cut/Pierce 1,049	Motor Vehicle Traffic 1,053	Motor Vehicle Traffic 667	Unintentional Natural/Evir 336	Unintentional Other 1,753	Unintentional Cut/Pierce 1,568

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

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Motor Vehicle Traffic 87	Motor Vehicle Traffic 1	Motor Vehicle Traffic 16	Motor Vehicle Traffic 30	Motor Vehicle Traffic 24	Unintentional Fall 27	Motor Vehicle Traffic 62	Motor Vehicle Traffic 25
Suicide 52	Unintentional Poisoning 1	Unintentional Poisoning 10	Unintentional Poisoning 22	Suicide 20	Motor Vehicle Traffic 16	Suicide 43	Unintentional Fall 13
Unintentional Poisoning 46		Suicide 4	Suicide 15	Unintentional Poisoning 12	Suicide 13	Unintentional Poisoning 33	Unintentional Poisoning 13
Unintentional Fall 39			Unintentional Fall 3	Unintentional Fall 9	Unintentional Poisoning 1	Unintentional Fall 26	Suicide 9

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

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 1,461	Unintentional Fall 42	Motor Vehicle Traffic 101	Self Injury 115	Unintentional Fall 258	Unintentional Fall 1,036	Unintentional Fall 509	Unintentional Fall 952
Motor Vehicle Traffic 386	Motor Vehicle Traffic 14	Self Injury 46	Motor Vehicle Traffic 102	Motor Vehicle Traffic 93	Motor Vehicle Traffic 76	Motor Vehicle Traffic 254	Self Injury 146
Self Injury 232	Unintentional Poisoning 12	Unintentional Fall 27	Unintentional Fall 98	Self Injury 61	Unintentional Poisoning 23	Self Injury 86	Motor Vehicle Traffic 132
Unintentional Poisoning 101	Self Injury 3	Unintentional Poisoning 13	Unintentional Poisoning 25	Unintentional Poisoning 28	Self Injury 7	Unintentional Poisoning 52	Unintentional Poisoning 49

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

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 11,299	Unintentional Fall 2,333	Unintentional Fall 1,579	Unintentional Fall 2,248	Unintentional Fall 2,370	Unintentional Fall 3,090	Unintentional Fall 5,009	Unintentional Fall 6,289
Motor Vehicle Traffic 3,312	Motor Vehicle Traffic 204	Motor Vehicle Traffic 1,151	Motor Vehicle Traffic 1,053	Motor Vehicle Traffic 667	Motor Vehicle Traffic 237	Motor Vehicle Traffic 1,550	Motor Vehicle Traffic 1,761
Unintentional Poisoning 293	Unintentional Poisoning 83	Self Injury 101	Self Injury 76	Unintentional Poisoning 54	Unintentional Poisoning 35	Unintentional Poisoning 156	Unintentional Poisoning 137
Self Injury 217	Self Injury 7	Unintentional Poisoning 53	Unintentional Poisoning 68	Self Injury 31	Self Injury 2	Self Injury 90	Self Injury 127

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

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	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
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