

Western Health District Burden of Injury 2004-2008

Highlights

Injury Deaths^a

- Injury was the underlying cause of death for 555 Western district residents during this five year time period. There was an average of 111 injury deaths per year.
- The average annual injury death rate was 57.5 per 100,000 Western district residents.
- Injury was the underlying cause for 5.8% of all deaths among Western district residents.
- 71.7% of injury deaths were due to unintentional causes; 25.8% were due to intentional causes.
- The three leading causes of injury deaths were motor vehicle injuries, suicide, and unintentional poisoning.

Injury Hospital Discharges^b

- There were 6,318 hospital discharges of Western district residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 1,263 such discharges per year. 5.3% of hospital discharges were for an injury related cause.
- The average annual injury hospital discharge rate was 655.1 per 100,000 Western district residents. Western 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 (673.7 per 100K) was higher than the rate for males (635.5 per 100K).
- 84.8% of injury hospital discharges were known to be due to unintentional causes; 9.4% were known to be due to intentional causes; less than 5% were not coded for injury intent.
- The three leading causes of injury hospital discharges were unintentional fall, motor vehicle crash, and self inflicted poisoning.

Injury Outpatient Emergency Department Visits^c

- There were 131,066 outpatient emergency department visits by Western district residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 26,213 visits per year. 26.1% of outpatient emergency department visits were for an injury related cause.
- The average annual injury outpatient emergency department visit rate was 13,590 per 100,000 Western 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 (15,240.8 per 100K) was significantly higher than the rate for females (12,022.0 per 100K).
- 89.2% of injury outpatient emergency department visits were known to be due to unintentional causes; 3.3% were known to be due to intentional causes; 6.9% of cases were not coded for injury intent.
- The three leading causes of injury outpatient emergency department visits were unintentional fall, struck by/against, and 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 Western 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 138		Unintentional Suffocation 3	Motor Vehicle Traffic 41	Unintentional Poisoning 48	Suicide 44	Unintentional Fall 49		Motor Vehicle Traffic 93	Motor Vehicle Traffic 45
2	Suicide 116		Unintentional Drowning 2	Suicide 16	Motor Vehicle Traffic 38	Motor Vehicle Traffic 25	Unintentional Unspecified 38		Suicide 89	Suicide 27
3	Unintentional Poisoning 83		Motor Vehicle Traffic 2	Unintentional Poisoning 8	Suicide 32	Unintentional Poisoning 23	Motor Vehicle Traffic 32		Unintentional Poisoning 58	Unintentional Unspecified 27
4	Unintentional Fall 58		Land Transport Other 2	Transport, Other 5	Homicide 9	Unintentional Suffocation 8	Suicide 24		Unintentional Fall 35	Unintentional Poisoning 25
5	Unintentional Unspecified 41		Pedestrian 2 Homicide 2	Homicide 3	Unintentional Fall 5	Homicide 7	Unintentional Suffocation 12		Unintentional Suffocation 14	Unintentional Fall 23

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

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Unintentional Fall 3,111	Unintentional Fall 135	Motor Vehicle Traffic 200	Motor Vehicle Traffic 252	Unintentional Fall 583	Unintentional Fall 2,081	Unintentional Fall 1,153	Unintentional Fall 1,958
2	Motor Vehicle Traffic 841	Motor Vehicle Traffic 40	Self Injury 127	Unintentional Fall 228	Motor Vehicle Traffic 203	Unintentional Unspecified 152	Motor Vehicle Traffic 516	Motor Vehicle Traffic 325
3	Self Injury 457	Transport, Other 30	Unintentional Fall 84	Self Injury 186	Self Injury 123	Motor Vehicle Traffic 146	Self Injury 184	Self Injury 273
4	Unintentional Poisoning 245	Struck By/Against 26	Transport, Other 54	Transport, Other 80	Unintentional Poisoning 72	Unintentional Poisoning 56	Transport, Other 182	Unintentional Unspecified 137
5	Transport, Other 243	Unintentional Poisoning 23	Unintentional Poisoning 34	Unintentional Poisoning 60	Transport, Other 52	Unintentional Overexertion 46	Unintentional Poisoning 115	Unintentional Poisoning 130

Five Leading Causes of Injury Emergency Department Visits Western District, 2004-2008

Rank	Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
1	Unintentional Fall 31,985	Unintentional Fall 7,871	Unintentional Struck By/Against 5,084	Unintentional Fall 6,703	Unintentional Fall 6,192	Unintentional Fall 6,617	Unintentional Fall 14,995	Unintentional Fall 16,990
2	Unintentional Struck By/Against 17,881	Unintentional Struck By/Against 5,346	Unintentional Fall 4,602	Unintentional Overexertion 5,932	Unintentional Overexertion 2,793	Unintentional Unspecified 873	Unintentional Struck By/Against 11,117	Unintentional Overexertion 7,589
3	Unintentional Overexertion 15,225	Unintentional Overexertion 2,011	Unintentional Overexertion 3,687	Unintentional Struck By/Against 4,603	Unintentional Cut/Pierce 2,546	Unintentional Cut/Pierce 808	Unintentional Cut/Pierce 8,322	Unintentional Struck By/Against 6,763
4	Unintentional Cut/Pierce 12,426	Unintentional Cut/Pierce 1,939	Motor Vehicle Traffic 3,019	Unintentional Cut/Pierce 4,272	Unintentional Struck By/Against 2,095	Unintentional Overexertion 802	Unintentional Overexertion 7,635	Motor Vehicle Traffic 4,886
5	Motor Vehicle Traffic 9,033	Unintentional Other 1,633	Unintentional Cut/Pierce 2,861	Motor Vehicle Traffic 3,140	Motor Vehicle Traffic 1,769	Unintentional Struck By/Against 753	Unintentional Other 4,526	Unintentional Cut/Pierce 4,103

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

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Motor Vehicle Traffic 138	Motor Vehicle Traffic 2	Motor Vehicle Traffic 41	Unintentional Poisoning 48	Suicide 44	Unintentional Fall 49	Motor Vehicle Traffic 93	Motor Vehicle Traffic 45
Suicide 116	Unintentional Poisoning 1	Suicide 16	Motor Vehicle Traffic 38	Motor Vehicle Traffic 25	Motor Vehicle Traffic 32	Suicide 89	Suicide 27
Unintentional Poisoning 83		Unintentional Poisoning 8	Suicide 32	Unintentional Poisoning 23	Suicide 24	Unintentional Poisoning 58	Unintentional Poisoning 25
Unintentional Fall 58			Unintentional Fall 5	Unintentional Fall 4	Unintentional Poisoning 2	Unintentional Fall 35	Unintentional Fall 23

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

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 3,111	Unintentional Fall 135	Motor Vehicle Traffic 200	Motor Vehicle Traffic 252	Unintentional Fall 583	Unintentional Fall 2,081	Unintentional Fall 1,153	Unintentional Fall 1,958
Motor Vehicle Traffic 841	Motor Vehicle Traffic 40	Self Injury 127	Unintentional Fall 228	Motor Vehicle Traffic 203	Motor Vehicle Traffic 146	Motor Vehicle Traffic 516	Motor Vehicle Traffic 325
Self Injury 457	Unintentional Poisoning 23	Unintentional Fall 84	Self Injury 186	Self Injury 123	Unintentional Poisoning 56	Self Injury 184	Self Injury 273
Unintentional Poisoning 245	Self Injury 9	Unintentional Poisoning 34	Unintentional Poisoning 60	Unintentional Poisoning 72	Self Injury 12	Unintentional Poisoning 115	Unintentional Poisoning 130

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

Overall	Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+	Male	Female
Unintentional Fall 31,985	Unintentional Fall 7,871	Unintentional Fall 4,602	Unintentional Fall 6,703	Unintentional Fall 6,192	Unintentional Fall 6,617	Unintentional Fall 14,995	Unintentional Fall 16,990
Motor Vehicle Traffic 9,033	Motor Vehicle Traffic 585	Motor Vehicle Traffic 3,019	Motor Vehicle Traffic 3,140	Motor Vehicle Traffic 1,769	Motor Vehicle Traffic 520	Motor Vehicle Traffic 4,147	Motor Vehicle Traffic 4,886
Unintentional Poisoning 988	Unintentional Poisoning 276	Self Injury 424	Self Injury 315	Unintentional Poisoning 188	Unintentional Poisoning 99	Unintentional Poisoning 506	Self Injury 488
Self Injury 884	Self Injury 46	Unintentional Poisoning 184	Unintentional Poisoning 241	Self Injury 90	Self Injury 9	Self Injury 396	Unintentional Poisoning 482

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

