OCCUPATIONAL FATALITY REPORT

Work-Related Motor Vehicle Fatalities

Maine Department of Labor
Bureau of Labor Standards

OFR 01/09

A Retrospective Review of Work-Related Motor Vehicle Fatalities in Maine (1998-2008)

Within the past 11 years, Maine has recorded 429 work-related fatalities. There were 274 fatal injuries and 155 fatal illnesses. Of these 429 fatalities, there were 64 motor-vehicle related incidents that accounted for 77 work-related deaths. There were 7 female and 70 male workers. The average age among these fatalities was 43 years old. Table 1 provides a comparison between work-related motor vehicle accidents (MVAs) fatalities to the total work-related fatalities in Maine.

(Van rollover incident)

From 1998 to 2008:

- There were 429 work-related fatalities
- There were 64 incidents that accounted for 77 (18.0%) motor vehicle related deaths
- There were 28 two-vehicle and 29 single vehicle accidents
- 7 workers were killed while working around motorized vehicles

Table 1: Comparison of work-related motor vehicle accidents (MVAs) fatalities to overall work-related fatalities in Maine (1998-2008)

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
All Fatalities	37	46	33	45	50	41	29	36	43	39	30
MVAs Related Fatalities	8	9	3	4	23	3	5	5	4	6	7
Percent of MVAs to all work-related fatalities	21.6	19.6	9.1	8.8	46.0	7.3	17.2	13.8	9.3	15.4	23.3

Data Sources: Maine Workers' Compensation First Reports of Injury, State Police Accident Reports, and the Census of Fatal Occupational Injuries (CFOI) program

Table 2: Occupations of workers killed in work-related motor vehicle accidents

Occupation	Number of Fatalities
Forester/Forestry/Landscaping	21
Tractor-Trailer Drivers	15
Retail & Sales	6
Truck Drivers (others)	5
Taxi/Limo/Bus Drivers	4
Police/Fire/EMT	3
Insurance/Finance	2
Delivery/Courier Service	2
*Others (a diverse list of occupations)	19

Figure 1 describes the types of vehicle involved in 57 of these fatalities.

Figure 1: Type of vehicles involved in Maine MVAs (n=57)

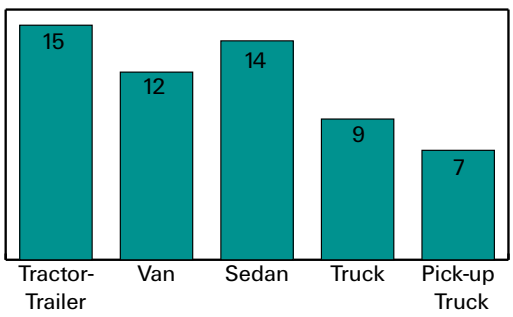

Table 3: Contributory factors in motor vehicle-related fatalities in Maine (1998-2008)

Contributory Factors	Two-Vehicle Accidents	Single-Vehicle Accidents	Working Around motorized vehicles
Lost control of vehicles	9	24	0
Drivers inattention	7	3	0
Struck by another vehicle	7		
Struck by a vehicle			7
Failture to yield	3	0	0
Brakes or tire failure	2	2	0
Total incidents	**28**	**29**	**7**
Seatbelt use	8	6	0
No seatbelt use	20	36	0

Nationally, the Federal Bureau of Labor Statistics had reported a preliminary count of 5,488 fatal work injuries for 2007 and 1,311 (23.8%) of these fatalities were categorized as highway related accidents (Event code: 41). Table 4 provides a comparison of work-related highway fatalities to overall work-related fatalities.

Table 4:Comparison of work-related fatalities to overall work-related fatalities in the United States

Year	2003	2004	2005	2006	2007
All fatalities	5,575	5,764	5,734	5,840	5,488
Highway-related fatalities	1,353	1,398	1,437	1,356	1,311
Percent of highway-Fatalities to total fatalities	24.3	24.3	25.0	23.2	23.8

Table 5 provides a description of the different categories of fatal events. The top three events that accounted for a high percent of these fatalities were:

- **Collision between vehicles, mobile equipment**
- **Vehicle struck stationary object/equipment on side of the road**
- **Non collision accidents**

Table 5 Highway fatalities in the United States

Year/Event Codes 410-419	2003	2004	2005	2006	2007
Collision between vehicles, mobile equipment (411)	648	702	718	657	639
Vehicle struck stationary object/equip on side of the road (413)	327	316	345	345	337
Non collision accidents (414)	321	323	318	303	286
Highway accident, unspecified (410)	34	23	22	23	11
Vehicle struck stationary object/equip on roadway (412)	17	27	27	19	32
Highway accident, not elsewhere classified (419)	6	7	7	9	6
Total Highway Related Fatalities	**1,353**	**1,398**	**1,437**	**1,356**	**1,311**

Table 6 provides a description of the different detailed categories of fatal events. The top three events that accounted for a high percentage of these fatalities were:

- **Moving in opposite direction**
- **Moving in same direction**
- **Moving in intersection**

Table 6: Detailed events in highway collision between vehicles in the United States

Year/Event Codes 4110-4119	2003	2004	2005	2006	2007
Moving in the opposite direction	269	276	265	239	264
Moving in same direction	135	147	175	155	144
Moving in intersection	124	145	134	140	121
Moving/standing vehicle: roadway	37	48	69	52	52
Moving/standing vehicle: side of road	26	26	24	23	17
Collision between vehicles, unspecified or not elsewhere classified	51	46	43	40	34
Re-entrant	6	14	8	8	7
Total	**648**	**702**	**718**	**657**	**639**

Table 7 provides a description of the different detailed categories of fatal non collision events. The number event that accounted for a high percent of these fatalities was:

- **Jack-knifed or overturned**

Table 7: Detailed events in highway non collision fatalities in the United States

Year/Event Codes 4140-4149	2003	2004	2005	2006	2007
Jack-knifed or overturned	252	262	273	254	250
Ran off highway	35	19	14	14	22
Non-collision between vehicles, unspecified or not elsewhere classified	30	32	30	29	12
Others	4	10	1	6	2
Total Non collision accidents	**321**	**323**	**318**	**303**	**286**

The National Institute for Occupational Safety and Health (NIOSH) recommends the following practical steps to preventing motor vehicle related fatalities.

As part of a driver safety program, NIOSH recommends employers should:

- Provide a key member of the management team with responsibility and authority to set and enforce a comprehensive driver safety policy.
- Require use of seat belts by all persons in a vehicle used on the job.
- Select vehicles that provide high levels of occupant protection.
- Maintain complete and accurate records of driving performance.
- Stipulate that driving is a task that requires full attention, including instructions to avoid placing or taking cell phone calls while the vehicle is in operation.
- Set schedules that allow adequate time for employees to make deliveries or visit clients without violating traffic laws or safety regulations.
- Ensure that employees are properly licensed and trained to operate the vehicle they are assigned.
- Implement a vehicle maintenance program that includes pre-trip inspections, immediate withdrawal from service of any vehicle with mechanical defects, and regularly scheduled withdrawal of vehicles for comprehensive inspection and maintenance.

www.cdc.gov/niosh/updates/upd-04-07-04.html

For preventing motor vehicle related fatalities in work zone, NIOSH recommends the following strategies for employers:

- Ensure that backing procedures are in place for the use of mobile construction vehicles, and use spotters for assistance when backing trucks and equipment
- Ensure that all workers, including sub-contractors, receive work zone safety training and are familiar with standard operating procedures before beginning work or being allowed entry into the work zone
- Ensure that the work zone is properly illuminated
- Consider installing after market electronic signaling devices or sensors on construction vehicles to help monitor the presence of workers on foot within blind areas
- Implement a "buddy system" for employees working around construction equipment

www2a.cdc.gov/NIOSH-FACE/state.asp?state=ALL&Incident_Year=ALL&Category2=0016&Submit=Submit

Other resources:

www.safetyworksmaine.com/
www.maine.gov/mdot/
www.osha.gov/SLTC/motorvehiclesafety/index.html
www.nhtsa.dot.gov/cars/rules/import/FMVSS/
www.osha.gov/OshDoc/data_Vehiclesafe/vehiclesafefactsheet.pdf

SafetyWorks!, a program of the Maine Department of Labor, provides free training and consultations on workplace safety and health issues. For more information, call toll-**free 1-877-SAFE-345.**

Occupational Safety and Health Surveillance

The Research and Statistics Unit generates work-related injury and illness statistics. It provides annual counts, case characteristics and incidence rates of fatal and non-fatal injuries and illnesses. The annual counts and case characteristics data are generated from the Employer's First Report of Occupational Injury or Disease submitted to the Maine Workers' Compensation Board (WCB), while incidence rates and fatal cases are derived from the Federal Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses (SOII) and the Census of Fatal Occupational Injuries (CFOI), respectively.

The Maine Department of Labor provides equal opportunity in employment and programs. Auxiliary aids and services are available to individuals with disabilities upon request