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Triodyne Inc.

Consulting Engineers & Scientists - Safety Philosophy & Technology
5950 West Touhy Avenue Niles, IL 60714-4610 (847) 677-4730
FAX: (847) 647-2047
e-mail: info@triodyne.com

GENERAL SAFETY

Falling: The Cook County Illinois Experience

by Claudine P. Giebs Myers[†], Peter J. Poczynok^{††}

From time to time insurance companies, government agencies and the National Safety Council report their statistics on the danger of falling. In 1976, for example, 14,300 people died as a result of falling accidents¹. At about this time Liberty Mutual made a specific analysis of over 8000 high cost worker's compensation accidents which revealed that twenty-four percent of the cases analyzed were falling accidents¹. From 1966 to 1970, 20% of the worker's compensation cases in the state of New York, a total of 120,682 injuries, were attributed to work surfaces as the accident agency². Despite these rather grim statistics, no concerted research effort has been undertaken with the intent of finding the solution to this persistent source of disabling injury and death.

One would expect the carnage associated with falls to manifest itself in lawsuits. We have thus turned to the renowned Cook County Verdict Reporter to look at possible patterns of fall behavior; specifically, we have surveyed the years 1991 and 1997.

A. Cases Reported

The cases reported on or listed as filed in the Cook County Verdict Reporter are civil cases in eleven categories:

- Automobile/accidents.
- Common carriers' liability for injuries to passengers.
- Property owners' liability to tenants, guests, and trespassers.
- Dramshops' (i.e., bars, liquor stores) liability for injuries caused by intoxicated customers.
- Street hazard liability for obstructions or negligent design or maintenance of roads or sidewalks.
- Workers' injuries on the job.
- Intentional torts (i.e., assault, discrimination, and false arrest).
- Professional malpractice.
- Product liability.
- Contracts or business torts.
- Miscellaneous actions.

The number of fall cases depicted in Table I represents a major safety threat. The percentage is fairly stable and reflects the general experience of the safety profession.

Table I - Cook County Cases

Year	Total Cases	Fall Cases	
		Number	Percentage
1991	1435	78	5.4%
1997	2193	150	6.84%

B. Gender

Care must be taken not to read too much into the results shown in Table II, as females do not necessarily fall more or hurt themselves more severely than males. It is possible that females simply file more lawsuits than males.

[†] Biomechanics Consultant, Triodyne Inc., Niles, IL.

^{††} Mechanical Engineer, Triodyne Inc., Niles, IL.

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Table II – Falls by Gender

Gender	Year			
	1991		1997	
	Number	Percentage	Number	Percentage
Male	34	44%	63	42%
Female	41	53%	87	58%
Unreported	3	3%	—	—

C. Events That Led to the Injury

Slipping is more insidious than tripping, where some physical stumbling block can usually be observed. Table III shows that slipping is the more prevalent precursor to falling than tripping, which is consistent with the general slip, trip and fall literature.

Table III – Injury Mechanism

Case Type	Year			
	1991		1997	
	Number	Percentage	Number	Percentage
Trip & Fall	14	17.95%	51	34.00%
Slip & Fall	23	29.49%	55	36.67%
Fall	36	46.15%	32	21.33%
Other	5	6.41%	12	8.00%
Total	78	100%	150	100%

D. Activity At Time of Accident

The most important observation from Table IV is that walking absolutely dominates all other activities preceding falling. This forensic result is consistent with worker's compensation statistics².

Table IV – Accident Activity

Activity	Year			
	1991		1997	
	Number	Percentage	Number	Percentage
Running	5	6.41%	2	1.33%
Walking	41	52.56%	67	44.67%
Horseplay	2	2.56%	0	
Climbing	7	8.97%	15	10.00%
Encumbered Gait	0		3	2.00%
Sitting	6	7.69%	1	0.67%
Standing	6	7.69%	3	2.00%
Swinging	1	1.28%	0	
Ladder Use/Adjustment	3	3.85%	8	5.33%
Fainting	1	1.28%	0	
Elevator: Ingress/Egress	2	2.56%	11	7.33%
Carrying	0		5	3.33%
Sports				
Rollerskating	0		1	0.67%
Treadmill	0		1	0.67%
Pushing Boat	0		1	0.67%
Bowling	0		1	0.67%
Vehicle: Entering/Exiting	1	1.28%	2	1.33%
Other	3	3.85%	29	19.33%
Total	78	100%	150	100%

Table V – Causative Agents

Activity	Year			
	1991		1997	
	Number	Percentage	Number	Percentage
Trip Hazard	9	11.54%	23	15.33%
Floor	5	6.41%	8	5.33%
Wet Floor	6	7.69%	13	8.67%
Elevator Floor	2	2.56%	8	5.33%
Sidewalk				
Ice/Snow	2	2.56%	15	10.00%
Holes/Grating	5	6.41%	7	4.67%
Asphalt/Pavement				
Slippery	2	2.56%	4	2.67%
Hole			7	4.67%
Ice/Grease	2	2.56%	5	3.33%
Platform	4	5.13%	0	
Ground	2	2.56%	2	1.33%
Carpet/Mat	2	2.56%	5	3.33%
Grass	2	2.56%	0	
Ramp	1	1.28%	1	0.67%
Scaffolding	1	1.28%	0	
People Mover	1	1.28%	1	0.67%
Industrial Site	3	3.85%	1	0.67%
Chair/Toliet	7	8.97%	1	0.67%
Steps/Stairs	12	15.38%	15	10.00%
Ladder	4	5.13%	8	5.33%
Other	6	7.69%	26	17.33%
Total	78	100%	150	100%

E. Causative Agents Related to Falls

Other than listing the obvious trip and slip agents, Table V is devoid of specific information that can be used to mitigate the fall danger. The problems are that there are so many factors that promote falling and no real pattern of mischief beyond the obvious which can be addressed in an effort to control this hazard.

F. Conclusion

Forensic data cannot be used to draw conclusions, but are useful for formulating hypotheses; e.g. women fall more than men because they wear high heeled shoes. Hypotheses must then be tested scientifically to determine their validity.

Ranking fall causative agents would be useful for prioritizing research efforts, safeguarding and safety training resources; e.g. should all staircases be carpeted; should sidewalk gratings be painted orange; should handrail usage be enforced; should ladders come with training videos?

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