

# INJURIES BY TRADE IN ONTARIO CONSTRUCTION

## Comparing 1987-89 to 1997-99



D. J. McVittie, Construction Safety Association of Ontario

The Construction Safety Association of Ontario (CSAO) compiled comprehensive data on lost-time injuries (LTIs) for the periods 1987-89 and 1997-99.

### Worker injuries, 1987-89 & 1997-99

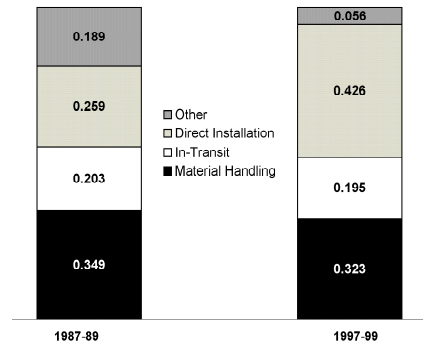
	1987-89	1997-99
Lost Time Injuries(LTIs)	53,803	15,504
Hours worked	1,175,000,000	925,000,000
LTIs per 200,000 hours	9.15	3.35

Source: Workplace Safety and Insurance Board of Ontario

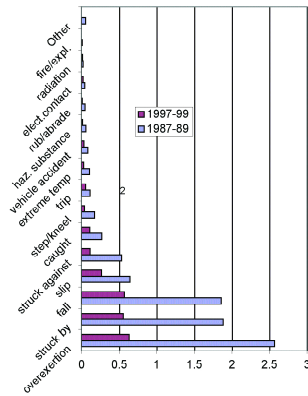
CSAO analyzed the data according to 21 construction trades/occupations, and grouped worker activities at the time of injury as follows:

- ◆ Material handling
- ◆ In-Transit
- ◆ Direct Installation
- ◆ Other

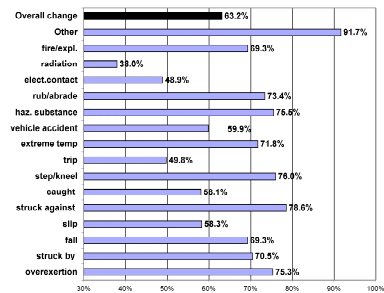
### Activity at time of injury (all trades)



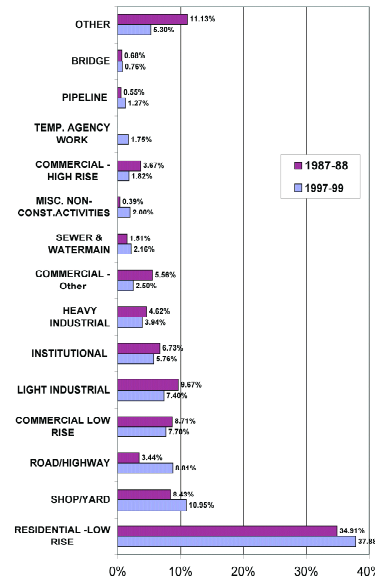
### Injury rate by accident type (all trades)



### Decrease in injury rate by accident type, 1987-89 / 1997-99



### Injury rate by type of project (all trades)



### Activity at time of accident (as % of total accidents in a trade)

Occupation	Material Handling	In-Transit	Direct Installation	Other/Not Reported
Carpenters (97-99)	21	16	56	8
Carpenters (87-89)	29	20	22	35
Electricians (97-99)	25	23	50	13
Electricians (87-89)	21	20	40	23
Pipe Trades (97-99)	30	20	45	20
Pipe Trades (87-89)	36	22	26	34

### 5 most common body parts injured

Occupation	1	2	3	4	5
Carpenters (97-99)	Back (20.3%)	Fingers (9.0%)	Knee (6.6%)	Ankle (6.6%)	Shoulders (6.1%)
Carpenters (87-89)	Back (24%)	Finger (10%)	Knee (7%)	Shoulder (6%)	Leg (5%)
Electricians (97-99)	Back (21.4%)	Hands (10.3%)	Knee (6.5%)	Ankle (6.3%)	Arm (5.9%)
Electricians (87-89)	Back (23%)	Eyes (8%)	Knee (7%)	Hand (6%)	Finger (6%)
Pipe Trades (97-99)	Back (25.6%)	Knee (8.2%)	Ankle (6.7%)	Fingers (6.6%)	Hands (6.2%)
Pipe Trades (87-89)	Back (29%)	Knee (7.0%)	Finger (7%)	Eyes (6%)	Ankle (6%)

### 5 most common accident types

Occupation	1	2	3	4	5
Carpenters (97-99)	Falls (28%)	Struck By (26%)	Overexertion (22%)	Slips (11%)	Caught (5%)
Carpenters (87-89)	Overexertion (27%)	Struck By (25%)	Falls (25%)	Slips (25%)	Struck Against (5%)
Electricians (97-99)	Overexertion (23%)	Falls (23%)	Struck By (15%)	Slips (12%)	Elect.Contact (8%)
Electricians (87-89)	Overexertion (28%)	Falls (21%)	Struck by (18%)	Slips (8%)	Elect.Contact (6%)
Pipe Trades (97-99)	Overexertion (31%)	Struck By (22%)	Falls (16%)	Slips (13%)	Struck Against (5%)
Pipe Trades (87-89)	Overexertion (33%)	Struck By (19%)	Falls (16%)	Slips (8%)	Struck Against (8%)

### Real changes reduce injuries

In most cases, the ranking of activities at time of injury did not change significantly between 1987-89 and 1997-99.

The proportion of material handling and in-transit injuries remained about the same. The change for direct installation and other activities, however, may reflect a real change in the way workers are injured.

The overall impact of housekeeping on injury rates appears to have declined substantially (14% of all injuries 1987-89 to 5.5% in 1997-99). This is consistent with anecdotal evidence from CSAO field staff: housekeeping and materials management improved significantly in most sectors during the intervening ten-year period.

In CSAO's analysis, the reduction in injury rates is the result of real changes in many different sectors and not the result of changes in the administration or management of claims.