Fatal injuries resulting from Falls to a Different Level occur in situations where fall arrest or travel restraint systems would be ineffective or impractical. Other interventions such as proper use of ladders, scaffolds and other work platforms, adequate guarding of floor openings, use of 3-point contact while climbing up or down ladders or getting on or off equipment are more likely to impact positively on the very high proportion of LTI Falls.

CSAO analysed over 2200 claim descriptions for Non-Fatal Lost Time Injuries (LTI's) for Falls to a Different Level (as opposed to slip and fall to the same level) occurring in Ontario's construction industry during 1997-1999.

Three reviewers, all with construction experience, independently reviewed the free text injury descriptions, working surface, project-type and construction-type for each LTI. Based on the claim information and familiarity with the type of work being performed by the injured worker(s), the reviewers classified them into the following groupings where the reviewer himself would, in the circumstances described:

1. Likely use Fall Arrest or Travel Restraint System (e.g. working on a sloped roof, erecting or dismantling steel structures)
2. Possibly use Fall Arrest or Travel Restraint System (e.g. insufficient information to determine the circumstances)
3. Not likely use Fall Arrest or Travel Restraint System (e.g. working from a step ladder, bench, scaffold or other platform)

Separate analysis of Fatal Fall Injury reports was conducted to determine if Fall arrest is a more appropriate intervention for that subset of Injuries.

Session: H5.0
Title: Back Injury Prevention

Moderator: Alfred Amendola

H5.1

Title: Use of Mechanical Lifts Reduced Injury Rates Among Nursing Personnel

Authors: Evanoff B, Wolf L, Aton L, Canos J, Bohr P, Collins J

Aims: To evaluate the effectiveness of mechanical patient lifts in reducing injuries among health care workers, and to describe an educational intervention to increase lift use.

Methods: We conducted a pre-post intervention study examining changes in injury and lost day rates in 5 long-term care facilities and 36 nursing divisions in 4 acute care hospitals. Stand up and full body lifts were deployed with a 2-hour training session. Data on injuries and lost days were collected through OSHA 200 logs; data on utilization of lifts were collected through employee interviews. Rates of injuries and lost days were expressed in terms of events per 100 full-time equivalents (FTE).

Results: Nursing personnel on intervention units had decreased rates of recordable injuries in the post-intervention period compared to the pre-intervention period (RR=0.82; 95% c.i.=0.68 – 1.00). Changes were also seen in rates of injuries resulting in lost days (RR=0.56; 95% c.i. 0.41-0.78) and in total lost days due to injury. Larger changes were seen in long-term care facilities than in acute care hospitals. Interviews were completed by 190 health care workers. Self-reported frequencies of lift use by registered nurses and by nursing aides were higher in the LTC facilities (10% and 50%, respectively) than in acute care hospitals (6% and 34%). The most common reasons given for non-use of lifts included lack of perceived need for lifts, insufficient training, and lack of time.

Conclusions: We conclude that the implementation of patient lifts can be effective in both the long-term care and the acute-care settings. Higher reported frequency of lift use was associated with greater reductions in injuries and lost days; further reductions in injury rates may be possible with increased use of lifts. We have recently begun to study the effectiveness of a more comprehensive educational intervention to increase the use of lifts.

H5.2

Title: The Use of Workers' Compensation and Medical Claims Data for Surveillance of Acute Back Injuries Among Health Care Workers

Authors: Pompeii LA, Dement J, Lipscomb HJ, Ostbye T

Health care workers are at risk of back injuries due to the physically demanding tasks they are required to perform, such as patient lifting. By combining workers' compensation records, private health insurance claims, and human resources data we sought to develop a more comprehensive surveillance system of back injuries among a cohort of 12,500 health care workers employed at a tertiary level medical center.

Between 1997 and 2001, a total of 901 employees filed 1,057 workers' compensation back claims. Claims were more likely to be filed by female workers (76%), and workers ages 30 to 49 (64%). Claims filed by African-American employees was disproportional to the percent employed, with 44% of claims filed by these workers who represent 26% of the medical center workforce. Almost 75% of the African-American claimants were employed in physically demanding jobs, including nursing (32%), dietary (22%), and housekeeping (20%). Nursing personnel filed more claims (44%) for back disorders com-

NOIRS 2003 ABSTRACTS

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DAY ONE —TUESDAY, OCTOBER 28, 2003

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10:30am - 12:00pm