

Nursing home ergonomics services evaluation now available

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A recently released Department of Labor and Industry (DLI) report, *Evaluation of the Workplace Safety Consultation Nursing Home Ergonomics Services Program*, presents the outcomes of the Minnesota OSHA Workplace Safety Consultation (WSC) unit's provision of ergonomics consultation services to nursing homes. The report describes the ergonomics assistance program, in which services were provided during 2004 and 2005, and compares the results of the nursing homes participating in the program (intervention homes) with a group of similar nursing homes that did not receive services from WSC (control homes). The report is available on the DLI Web site at www.dli.mn.gov/RS/PDF/nursinghome_ergo.pdf.

The report documents the changes in the injury and illness rates of the nursing homes, their workers' compensation outcomes and a symptom survey given to the nursing staff. Some of the highlights of the results are listed below.

- Management commitment to safety improvements and advice from the WSC ergonomics consultants resulted in a significant increase in the number of electric lifts for safe patient-handling for the intervention homes. The number of electric lifts was not significantly different between the intervention and control groups in 2004, but by 2007 there were significant differences in the number of electric lifts. The intervention homes averaged more than double the number of electric lifts as the control homes.
- The intervention homes reported a mean decrease of 2.1 OSHA-recordable back injury cases per 100 full-time equivalent (FTE) workers (a 27 percent decrease) from 2003 to 2007, compared with a decrease of 1.4 OSHA-recordable back injury cases per 100 FTE workers (a 12 percent decrease) for the control homes.
- The intervention nursing homes had a mean decrease of 6.0 OSHA-recordable nursing staff cases per 100 FTE workers (a 39 percent decrease), compared with a decrease of 2.9 OSHA-recordable nursing staff cases per 100 FTE workers (a 10 percent decrease) for the control homes.
- The decrease in the OSHA-recordable case rate among all nursing home workers for the intervention homes was

Nursing homes, continues ...

Safe patient handling: model program available

For the past three years, articles have appeared in *Safety Lines* describing the requirements of Minnesota Statutes §182.6551 through 182.6553 (hospital, outpatient surgical centers and nursing homes) and, later, M.S. §182.6554 (clinical settings). This may be the last reminder to facilities covered by M.S. §182.6554 because those facilities had until July 1, 2010, to establish a written safe patient handling plan.

Facilities covered by M.S. §182.6553 have until Jan. 1, 2011, to achieve their goal of minimizing manual lifting.

While six other states have similar legislation, and other states are considering legislation, the requirements may not be the same. Vendors offering programs may not provide material in compliance with the Minnesota standard. To help those facilities and to ensure their programs meet all the requirements of the Minnesota standard, a model program has been developed by Minnesota OSHA Workplace Safety Consultation's Certified Professional Ergonomist Breca Tschida.

A copy of the model program and other resources are available online at www.dli.mn.gov/WSC/SPHlegislation.asp.

8.3 cases per 100 FTE workers (a 42 percent decrease) compared with a drop of 3.2 cases for the control homes (an 11 percent decrease).

- Comparisons of measures related to workers' compensation claims for musculoskeletal disorders (MSDs) among the nursing staff showed mixed results.
 - Decreases in the workers' compensation indemnity claims rate were similar for both groups of homes, although, when expressed as percentages, the intervention homes' mean percentage decrease was nearly twice the amount of the control homes' decrease.
 - The mean decrease in weeks of temporary total disability was slightly more than 11 weeks per 100 FTE workers for the control homes, compared with a mean decrease of three weeks per 100 FTE workers for intervention homes.
 - There was no consistent pattern in the trends for indemnity costs. The control homes had a larger mean decrease and a greater percentage decrease, while the intervention homes showed much less variability in the mean rate.
- The intervention homes' mean indemnity claims rates were higher than the control homes' mean rates in 2002 and were below the control homes' mean rates in 2007, showing a 36 percent mean decrease compared with a 10 percent mean decrease among the control homes.
- The workers' compensation benefit costs in 2007 were compared with the estimated 2007 costs if the homes in each group had the same claims rates as in 2003. The costs per 100 FTE workers in the intervention homes were 42 percent lower than the estimated costs, compared with a 25 percent cost difference for the control homes. If the intervention homes had the same percentage cost difference as the control homes, the cost rate decrease would have been \$13,800 less per 100 FTE workers than the decrease computed with the intervention home percentage.
- At the time of the initial symptom survey (2004 or 2005), 63 percent of the nursing staff in the intervention homes reported having pain or discomfort on a weekly or daily basis in at least one body part. Forty-five percent reported frequent lower back pain and 34 percent reported frequent neck and shoulder pain. While 26 percent reported that their pain interfered with their work on a weekly or daily basis, among those with frequent pain, the percentage was 41 percent.
- In the follow-up symptom survey (2007 through 2009), the percentages of nursing staff workers in the intervention homes reporting pain for the various body regions were generally equal to or a few percentage points lower than the corresponding percentages in the initial survey. Across all body parts, 61 percent of the workers surveyed reported frequent pain. Pain interfered with work for 23 percent of the respondents and for 38 percent of those with frequent pain.
- Regardless of job tenure, approximately six of every 10 nursing assistants experienced pain on a weekly or daily basis. The percentage of nursing assistants with less than one year of job tenure reporting frequent upper or lower back pain is very similar to the percentage among nursing assistants with more than 20 years of job experience.
- Frequent pain is associated with the frequency of patient lifting, and nursing staff members who were more likely to perform frequent lifts without using mechanical lifting devices were more likely to report frequent pain.