## DoD Ergonomics Working Group NEWS



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## **CHPPM Ergonomics Program**

## Getting a Handle on Patient Handling

Preventing occupational injuries is one of the primary goals of the Ergonomics Program at the U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM). In an ongoing series of initiatives aimed at improving workplace safety conditions and behaviors, CHPPM recently conducted an investigation into nursing

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risk and injury at Walter Reed Army Medical Center. One hundred seventy five nurses from inpatient units participated in this important, original investigation. " The purpose of our study was to assess patient handling demands and to use the study results as a basis for Department of Defense (DoD) best practice models for nurses and equipment recommendations," explains CHPPM ergonomist Kelsey McCoskey M.S., OTR/L. According to her figures, of nursing staff at Walter Reed who responded to the study, 46% are active duty, with civilian staff and contractor nurses making up the balance.

"Nursing is a high-risk occupation, second only to heavy industry, because the high volume of lifting patients every day leads to fatigue, muscle strain and injury," McCoskey asserted. The figures support her claim. In general, over 52% of nurses complain of chronic back pain lasting more than 14 days, while a staggering 12% leave the profession each year due to chronic or acute back injuries and pain. Among all occupations with back injury claims, nursing aides and practical nurses rank fifth and ninth, respectively, for workers' compensation, with an estimated 20% of transfers to different jobs associated with back injury risk.

COL Howard Kimes, MEDCOM HQ, summarized the problem. "We can't afford to lose our great caregivers from a preventable injury," he said. "I mean that both in that it's hard to replace someone with those skills and in the literal sense of affording the money to pay for the injury."

McCoskey agrees. "There's a concern that a nursing shortage may lead to patient deaths. With nurses leaving because of preventable injury, and with a decrease in nurses joining the profession, there's also a concern for productivity."

The CHPPM Patient Handling Study found that the horizontal transfer of patients is particularly high risk and results in high injury rates. Industry-standard guidelines that were developed to address the high risk of vertical lifting don't apply to these horizontal movements. The good news, however, is that there are solutions. Transferring patients out of bed can be responsible for nearly one-fourth of all low back injuries in nurses. "We're currently seeking the approval of the Institutional Review Board at Walter Reed for the second phase of the investigation which involves the purchase of lifting equipment called lateral transfer devices--one for each bed--for the five higher-risk intensive care and general surgical and medical units. We're hoping to have this in place early in the new year."

McCoskey's ambitions aren't limited to equipment purchase. "We have a I-hour training program for nursing staff and supervisors that we'd like to deliver before any equipment is purchased," she explained. "We want to brief nursing staff at Walter Reed first, to get this information to them and to get their support." McCoskey emphasized that training would include provisions for injury reporting and staff compliance.

The end goal is to move these initiatives beyond this one hospital. "We're focusing on Walter Reed as a pilot to find out what works, "said McCoskey. "Ideally, I'd also like to look at long-term care and the technical labs. These are different nursing environments and they may have different needs from inpatient units."

As McCoskey concluded, "This investigation, the training program and our recommendations for equipment purchase are all about nursing support. We're really looking forward to seeing a difference as a result of this initiative."

If you have questions about this study, or would like more information, contact Ms. Kelsey McCoskey, U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM), at kelsey.mccoskey@apg.amedd.army.mil