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**TESTIMONY RE: H. B. No. 5740 (RAISED) AN ACT CONCERNING  
ERGONOMICS AND WORKPLACE SAFETY.**

**LABOR AND PUBLIC EMPLOYEES COMMITTEE  
MARCH 14, 2006**

Good morning Senator Prague, Representative Ryan and members of the Labor and Employees Committee.

Thank-you for the opportunity to provide testimony on behalf of the Connecticut Nurses' Association (CNA), the professional organization for registered nurses in Connecticut. I am Dr. Mary Jane Williams, past-president of the Connecticut Nurses' Association, current chairperson of its Government Relations Committee and professor of nursing at the University of Hartford. I have practiced nursing for over 40 years and have been educating nurses in Connecticut for 35 years. I am providing comments in support to RAISED BILL NO. 57406, AN ACT CONCERNING ERGONOMICS AND WORKPLACE SAFETY.

Connecticut Nurses' Association enthusiastically supports this bill for the following reasons:

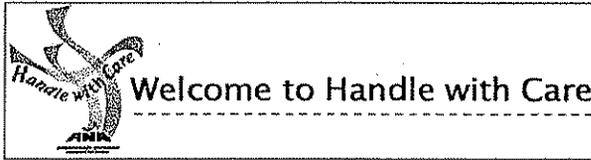
- The most current research conducted by Dr. Audrey Nelson and her colleagues at the Tampa Veterans System support the concept of "SAFE HANDLING" based on the outcomes of research conducted related to handling. Dr. Nelson's research is the first that has ever been done using patients and related to lifting and handling since the studies conducted in 1952.
- **High rates of musculoskeletal disorders (MSDs) for nurses/nursing personnel**
  - Efforts related to the American Nurses Association's "Safe Patient Handling" campaign have brought more needed attention to the recognition that manual patient handling is a very high-hazard task. The incidence of musculoskeletal

disorders (MSDs) continue to persist at very high rates for nurses and other nursing personnel.

- Nursing personnel are among the highest at risk for MSDs with nursing aides, orderlies and attendants ranked first (Bureau of Labor Statistics) and RNs sixth listed in at-risk occupations for sprains and strains.
- **Back injuries complicate the growing nursing shortage**
  - Studies of back-related worker's compensation claims reveal that nursing personnel have the highest claim rates of any occupation or industry. This is of particular concern when it's noted that an estimated 12% of nurses leave the profession annually due to back injuries and more than 52% complain of chronic back pain.
  - Injuries that are secondary to patient handling are compounding factors with the aging of the nursing workforce, declining retention and recruitment rates and even the lowering of the social value of nursing.
- **A number of Connecticut's hospitals have already instituted safe patient handling programs and pilot projects. That can serve as models for other organizations.**
- **Federal OSHA (3/03) released its "Guidelines for Nursing Homes - Ergonomics for the Prevention of Musculoskeletal Disorders**
  - In these "Guidelines," OSHA recommends that "manual lifting of patients be minimized in all cases and eliminated when feasible." Although a "guideline" (not regulation), it clearly reflects the recognition that manual patient handling is an extremely high-risk job task.

**This bill, which requires employers (including health care organizations) to develop a written ergonomics policy through their health and safety committees and programs, is an important step in making health care workplaces safer for nurses, their colleagues and the patients that they care for.**

Thank you.



## Welcome to Handle with Care

### Fact Sheet

ANA's Handle with Care campaign is intended to develop and implement a proactive, multi-faceted plan to promote the issue of safe patient handling and the prevention of musculoskeletal disorders among nurses in the U.S. Through partnerships and mobilization of ANA-related groups, nursing organizations, research experts, academic centers, and health care systems, the campaign seeks to educate, advocate, and facilitate change from traditional practices of manual patient handling to emerging, technology-oriented methods. The Handle with Care campaign seeks to reshape the professional and disciplinary dimensions of nursing, influence the mindset of the health care industry, and inform federal/state policy by highlighting how safe patient handling produces benefits to patients and the nursing workforce.

### Nursing Practice and Musculoskeletal Disorders (MSDs)

- Patient handling tasks are recognized as the primary cause for musculoskeletal disorders among the nursing workforce. Of primary concern are back injuries and shoulder strains which can both be severely debilitating.
- A variety of patient handling tasks exist within the context of nursing care, such as lifting, transferring, and repositioning patients, and, are typically performed manually.
- Patient handling tasks most frequently associated with low back pain: lifting and forceful movements.
- Continuous, repeated performance of these activities throughout one's working lifetime results in the development of musculoskeletal disorders.
- The physical environment of the health care setting also contributes to work-related musculoskeletal disorders. Configurations of an area within patient rooms and the placement of furniture and treatment equipment (e.g., critical care unit monitors, ventilator machines) can limit the space needed for patient handling situations.
- Proper body mechanics is a "myth." Traditionally taught to student nurses to counteract the physical stress of patient handling, such as lifting, so-called "proper" body mechanics do not translate well to nursing practice. Early findings of body mechanics studies were based on static loads (i.e., boxes with handles) and primarily focused on men. Further, body mechanic methods primarily concentrate on the lower back for lifting and do not account for other vulnerable body parts involved in other types of patient handling tasks, such as lateral transfers from gurney to bed along a horizontal plane

### A Profession at Risk

- Compared to other occupations, nursing personnel are among the highest at risk for musculoskeletal disorders. The Bureau of Labor Statistics lists RNs sixth in a list of at-risk occupations for strains and sprains that included nursing personnel, with nurses aides, orderlies and attendants (first); truck drivers (second); laborers (third); stock handlers and baggers (seventh); and construction workers (eighth).
- Additional estimates for the year 2000 show that the incidence rate for back injuries involving lost work days was 181.6 per 10,000 full-time workers in nursing homes and 90.1 per 10,000 full-time workers in hospitals, whereas incidence rates were 98.4 for truck drivers, 70.0 for construction workers, 56.3 for miners, and 47.1 for agriculture workers.
- Lower back injuries are also the most costly musculoskeletal disorder affecting workers. Studies of back-related workers compensation claims reveal that nursing personnel have the highest claim rates of any occupation or industry.

- Research on the impact of musculoskeletal injuries among nurses:
  - 52 percent complain of chronic back pain <sup>1</sup>;
  - 12 percent of nurses "leaving for good" because of back pain as main contributory factor <sup>2</sup>;
  - 20% transferred to a different unit, position, or employment because of lower back pain, 12 percent considering leaving profession <sup>3</sup>;
  - 38 percent suffered occupational-related back pain severe enough to require leave from work <sup>4</sup>; and
  - 6 percent, 8 percent, and 11 percent of RNs reported even changing jobs for neck, shoulder and back problems, respectively. <sup>5</sup>

### **Effectiveness of Safe Patient Handling Equipment & Devices**

- The development of assistive patient handling equipment and devices has essentially rendered the act of strict "manual" patient handling unnecessary as a function of nursing care.
- Assistive patient handling equipment and devices control the ergonomic hazard associated with patient handling by technologically "engineering out" the energy/force imposed onto the nurse worker during the act of lifting, transferring or repositioning patients.
- Application of assistive patient handling technology fulfills an ergonomic approach within nursing practice by designing and fitting the job or workplace to match the capabilities and limitations of the human body.
- A growing number of health care facilities have incorporated patient handling technology and have reported positive results. Injuries among nursing staffs have dramatically declined since implementing patient handling equipment and devices along with an institutional commitment to the safest available methods. As a result, the number of lost work days secondary to injury and staff turnover has declined. Cost-benefit analyses have also shown that assistive patient handling technology successfully reduces workers' compensation costs for musculoskeletal disorders.

### **Patient Benefit**

- The weight of adult patients requiring lifting averages 169 lbs. (range 91-387 lbs.). Weights and sizes of patients can vary significantly, particularly considering geriatric patient populations.
- The potential for patient injury, such as falls and skin tears, as a consequence of a manual handling mishap is reduced by using assistive equipment and devices. They provide a more secure process for lifting, transferring, or repositioning tasks. Patients are afforded a safer means to progress through their care. Moreover, any anxiety patients may feel with having a person susceptible to injury perform the task can be relieved and increase confidence with the use of assistive equipment.
- Using assistive patient handling equipment contributes to patient comfort. Patients are less subjected to awkward or forceful handling that can be experienced when lifting, transferring, or repositioning is done manually. Rather than manipulating a patient's body parts, equipment and device parts are manipulated.
- Patient dignity is protected by using assistive equipment and devices. A patient's self-esteem and privacy can be compromised during difficult patient handling situations when performed manually. The use of technology for such circumstances can offer a considerate way of completing patient handling tasks that respects a patient's sense of dignity.
- Assistive patient handling equipment can be selected to match a patient's ability to assist in their own movement, thereby promoting the expression of patient autonomy.

### Regulation/Legislation

- The Occupational Safety and Health Administration (OSHA) promulgated a standard intended to protect workers from ergonomic hazards, such as patient handling. In March 2001, Congress repealed the OSHA standard and ordered that the agency cease all work related to the standard.
- In March 2003, federal OSHA released its "Guidelines for Nursing Homes - Ergonomics for the Prevention of Musculoskeletal Disorders." In these "Guidelines," which are not requirements, OSHA recommends that **"manual lifting of patients be minimized in all cases and eliminated when feasible."**
- Legislation was introduced in three states in 2003 but was not enacted. For the latest updates, see <http://nursingworld.org/gova/state/2003/ergo.pdf>

### Resources

- ANA's Handle with Care Campaign Web site [www.NursingWorld.org/handlewithcare/](http://www.NursingWorld.org/handlewithcare/)
- ANA Position Statement - "Elimination of Manual Patient Handling to Prevent Work-Related Musculoskeletal Disorders"  
<http://nursingworld.org/readroom/position/workplac/pathand.htm>
- ANA Brochure - "Preventing Back Injuries: Safe Patient Handling and Movement"  
<http://nursingworld.org/osh/ergonomics.pdf>
- Nelson, A., Fragala, G., Menzel, N. (2003). "Myths and Facts About Back Injuries in Nursing" American Journal of Nursing, 103: 2.
- Nelson, A. et al (2003). "Safe Patient Handling and Movement." American Journal of Nursing, 103: 3.
- Patient Safety Center of Inquiry, Tampa Veterans' Health Administration  
[www.patientsafetycenter.com](http://www.patientsafetycenter.com)
- OSHA's voluntary ergonomics guidelines for the prevention of musculoskeletal disorders in nursing homes  
[http://www.osha.gov/ergonomics/guidelines/nursinghome/final\\_nh\\_guidelines.html](http://www.osha.gov/ergonomics/guidelines/nursinghome/final_nh_guidelines.html)

### References

1. Nelson, A. State of the science in patient care ergonomics: Lessons learned and gaps in knowledge. Presented at the Third Annual Safe Patient Handling and Movement Conference. March 5, 2003, Clearwater Beach, FL.
2. Stubbs D.A., Buckle P.W., Hudson M.P., Rivers P.M., & Baty D. (1986). Backing out: nurse wastage associated with back pain. International Journal of Nursing Studies, 23, 4: 325-336.
3. Owen, B.D. (1989). The magnitude of low-back problem in nursing. Western Journal of Nursing Research, 11, 2: 234-242.
4. Owen, B.D. (2000). Preventing injuries using an ergonomic approach. AORN Journal, 72, 6: 1031-1036.
5. Trinkoff, A.M., Lipscomb, J.A., Geiger-Brown, J., Storr, C.L., Brady, B.A. (2003). Perceived physical demands and reported musculoskeletal problems in registered nurses. American Journal of Preventive Medicine, 24, 3: 270-275.