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A Scholarly Journal of the American Nurses Association

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Handle With Care®: The American Nurses Association's Campaign to Address Work-Related Musculoskeletal Disorders

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Abstract

In response to the significant number and severity of work-related back injuries and other musculoskeletal disorders among nurses, the American Nurses Association (ANA) has launched the [Handle With Care® campaign*](#). The campaign seeks to build a health care industry-wide effort to prevent back and other musculoskeletal injuries. This is being done through developing partnerships and coalitions, education and training, increasing use of assistive equipment and patient-handling devices, reshaping nursing education to incorporate safe patient handling, and pursuing federal and state ergonomics policy by highlighting technology-oriented safe-patient handling benefits for patients and nurses. In the absence of ergonomics regulations at national or state levels that protect health care workers, ANA has taken on alternative approaches to encourage a movement to control ergonomic hazards in the health care workplace and prevent back injuries among the nation's nursing workforce.

Key words: back injury, devices, ergonomics, equipment, Handle With Care®, musculoskeletal disorders, patient care ergonomics, safe patient handling, nursing, OSHA, occupational safety, nurse safety

Work-related musculoskeletal disorders are the leading occupational health problem plaguing the nursing workforce. Of primary concern are back injuries, which can be severely debilitating for nurses, though other types of musculoskeletal injuries can involve additional body parts such as the neck, shoulders, wrists, and knees. Compared to other occupations, nursing personnel are among the highest at risk for musculoskeletal disorders. Nursing aides, orderlies, and attendants ranked second and registered nurses sixth in a list of at-risk occupations for strains and sprains that included truck drivers (first), laborers (third), and construction workers (seventh) ([United States Department of Labor \[U.S. DOL\], 2002](#)) ([see Table 1](#)). 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 comparative incidence rates per 10,000 full-time workers were 98.4 for truck drivers, 70.0 for construction workers, 56.3 for miners, and 47.1 for agriculture workers ([U.S.DOL, 2000](#)). In 2001, for cases involving days away from work among registered nurses (total of 24,719), 4,547 were categorized as overexertion in lifting and 14,832 were listed as sprains or strains ([U.S. DOL, 2001](#)).

Work-related musculoskeletal disorders are the leading occupational health problem plaguing the nursing workforce.

Table 1. Rank Of At-Risk Occupations For Strains And Sprains, 2000
([Bureau of Labor Statistics, April 2002](#))

Rank	Occupation
1	Truck Drivers

2	Nursing Aids, Orderlies & Attendants
3	Laborers, Non-Construction
4	Assemblers
5	Janitors and Cleaners
6	Registered Nurses
7	Construction Laborers
8	Cashiers
9	Carpenters
10	Stock Handlers and Baggers

The risk for musculoskeletal injury secondary to manual patient handling crosses all specialty areas of nursing. As such, no nurse is effectively clear from risk. The impact on the nursing workforce may lead to adverse consequences at the organizational level, as well, through increased absenteeism, lost work time, burnout, decreased retention, high turnover, and threatened recruitment. The extent of musculoskeletal disorders among the U.S. nursing workforce is particularly distressing when contemplated in the context of the current nursing shortage. Injuries secondary to patient handling tasks compound factors such as the aging of the nursing workforce, declining retention and recruitment rates, and lowering social value of nursing to worsen the shortage problem.

The Institute of Medicine (IOM) in its report *Keeping Patients Safe* (IOM, 2003) stated that "[t]he loss of strength and agility that often accompanies aging affects the ease with which nurses can perform patient care activities that require them to turn, lift, or provide weight-bearing support to patients" (p.71). Examples of research that illustrate the impact of musculoskeletal disorders on the nursing shortage report that: 12% of nurses were "leaving for good" because of back pain as a main contributory factor (Stubbs, Buckle, Hudson, Rivers, & Baty, 1986); 20% transferred to a different unit, position, or employment because of low back pain and 12% considered leaving the profession (Owen, 1989); 38% suffered occupational-related back pain severe enough to require leave from work (Owen, 2000); 6%, 8%, and 11% of RNs reported changing jobs for neck, shoulder, and back problems, respectively (Trinkoff, Lipscomb, Geiger-Brown, Storr, & Brady, 2003).

Sources of Injury or Cause

The complexity of patient care encompasses an assortment of variables that place nurses at high risk for injury. The interplay between factors related to the patient, nurse, and physical environment poses a dangerous ergonomic hazard in the health care work setting. Identifying each allows for clearer examination of their association with work-related musculoskeletal disorders.

Unsafe Patient Handling

Nurses suffer a disproportionate amount of musculoskeletal disorders...

Nurses suffer a disproportionate amount of musculoskeletal disorders consequent to the cumulative effect of repeated patient handling events, often involving unsafe loads (Smedley, Egger, Cooper, & Cogganon, 1995). A variety of patient handling tasks exist within the context of nursing care, such as lifting, transferring, and repositioning patients. Continuous, repeated performance of these activities throughout one's working lifetime results in the

development or exacerbation of musculoskeletal disorders. Nurses often lift, transfer, or

reposition patients with outstretched arms or bent forward in awkward postures and positions increasing the risk for injury (Nelson, 2003). Because patient handling tasks are conventionally performed manually, nurses are significantly exposed to the ergonomic hazard associated with this high risk duty. Manual patient handling characterizes the lifting, transferring, and repositioning of patients without the use of assistive equipment. Nurses have historically been trained to use "proper" body mechanics to prevent injury from lifting and transferring patients. However, questions arise as to the true value and applicability of body mechanics training to the practice of nursing (Nelson, Fragala, & Menzel, 2003).

The National Institute for Occupational Safety and Health (NIOSH) offers a "lifting equation" as a tool to determine safe lifting limits (Waters, Putz-Anderson, & Garg, 1994). NIOSH states that the average worker should not lift more than 51 pounds under controlled and limited circumstances. The parameters of this designation, though, cannot be appropriately generalized to nursing practice because it was derived on the basis of defined conditions (e.g., lifting a stable box with handles from ground to waist) that do not translate well to manual patient handling or other ergonomic hazards in the health care workplace. While NIOSH's 51 pounds is typically cited as a conventional reference number, it is important to note that the developers of the lifting equation explicitly recognize the limits of its application and call for the elimination of manual lifting wherever possible through the use of technologic equipment.

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Patient Characteristics as a Risk for Injuries to Nurses

Patient characteristics are particularly meaningful when determining the risk of injury associated with manual patient handling. Patient height, weight, body shape, and condition (e.g., contractures, spinal injuries, orthopedic conditions, post-surgical periods, and drains or intravenous line placement) become significant factors in patient handling. Patients are often at some degree of dependence and can offer limited, if any, levels of assistance in moving themselves (Nelson, 2003) or may have limited ability to comprehend instructions and to cooperate. Some may become agitated or combative, commonly because they experience pain while being moved. The changing profile of today's patient population makes patient handling challenging. In-patient care has been largely populated by patients with higher levels of acuity, a growing elderly population, and the rising numbers of bariatric (clinically obese) patients (Thomason, 2003).

Physical Patient Care Environments

The physical environment of care can further pose restrictions on movement and positioning within the specific context of patient handling as well as other nursing tasks. Depending on the care setting (e.g., standard hospital patient room, skilled nursing facility, home care), nursing staff must work within the constraints of the physical area to perform their duties, for example, in lifting patients or reaching for elevated monitors. A personal story of a nurse who suffered a back injury secondary to working in an intensive care setting can be found on the Handle With Care® website (ANA, 2003c). Nurses may be forced into awkward, twisted positions because of limited work space. Hospital furniture and equipment as well as the presence of other hospital staff can create barriers that dictate damaging postures and movements.

Handle With Care® Campaign

Handle With Care® (ANA, 2003b) is a national campaign established in September 2003 by the American Nurses Association (ANA) 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 United States. Through a variety of activities, the campaign seeks to educate, advocate, and facilitate change from traditional practices of manual patient handling to emerging, technology-oriented methods. The campaign seeks to build a health care industry-wide effort to prevent back and other musculoskeletal injuries. This is being done through developing partnerships and coalitions, education and training, increasing use of assistive equipment and patient-handling devices, reshaping nursing education to incorporate safe patient handling, and pursuing federal and state ergonomics policy by highlighting technology-oriented safe-

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patient handling benefits for patients and nurses.

...The overarching goal...is to motivate the health care industry to take actions that reduce the incidence of musculoskeletal injuries...

The overarching goal of the Handle With Care® campaign is to motivate the health care industry to take actions that reduce the incidence of musculoskeletal injuries among nurses while improving the quality of nursing care in the context of patient handling.

ANA's Handle With Care® campaign rests on the cornerstone of a position statement titled, "Elimination of Manual Patient Handling to Prevent Work-Related Musculoskeletal Disorders" (ANA, 2003a). This position statement articulates the beliefs and perspectives held by ANA about manual patient handling with the primary interest of nursing in mind. Its principle points are that (a) manual patient handling is unsafe

and directly responsible for musculoskeletal disorders among nurses, (b) patient handling can be performed safely with the use of assistive equipment and devices, and (c) there exists a simultaneous reduction of risk for injury among nursing staff and improvement in quality of care for patients. The position statement is intended to be a resource that informs and calls on the health care industry to prevent musculoskeletal disorders among nurses while enhancing patient safety, comfort, and dignity through the use of assistive patient handling equipment and devices. Moreover, this position statement delivers a message to the professional nursing community that ANA maintains its commitment to their health and safety as a core issue (ANA, 2003a).

The development of patient care ergonomics programs that include the use of assistive patient handling equipment and devices has essentially rendered "manual" patient handling unnecessary. A growing selection of equipment and devices makes available technology suitable for the variety of patient handling tasks performed by nurses (see Table 2) (Nelson et al, 2003). Level of quality, durability, availability, and the appropriateness/effectiveness for patient conditions does vary across all product lines and manufacturers. Further, facility or unit specific evaluation and selection process that includes front line users is necessary to help ensure proper and diligent use.

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Inflatable lateral-assist devices	Flexible mattress inflated with air to create a cushioned layer for patient transferring
Friction-reducing lateral-assist devices	Boards made with smooth, low-friction material used for patient transferring
Mechanical lateral-assist devices	Height-adjustable stretchers used for patient transferring
Transfer chairs	Chairs that convert into stretchers eliminating the transfer from a horizontal plane (bed or stretcher) to a seated position
Powered full-body sling lifts	Portable or ceiling mounted lift devices to lift and transfer

	highly dependent patients
Powered stand-assist and repositioning lifts	Lift with arm and/or back slings to assist patients with some weight-bearing ability
Bed improvements to support transfer or repositioning	Beds that convert directly into chairs or equipped with "shearless pivot" that minimizes slipping toward foot of bed when head is raised
Sliding boards	Boards made of smooth, rigid, low-friction material for seated bed-to-chair or chair-to-toilet transfers that act as a supporting bridge
Gait belts	Belt with handles placed around the patient's waist to improve grasp
Stand-assist and repositioning aids	Secure devices either free-standing or attached to beds to help support patients lift themselves

To understand the effectiveness of assistive patient handling equipment in reducing the risk of musculoskeletal injury for the nurse worker, this equipment should be viewed as engineering controls. Engineering controls are methods of controlling worker exposures by modifying the source or reducing the amount of agent released ([Plog, Niland, & Quinlan, 1996](#)). In patient handling, the agent is the energy/force imposed on the nurse during the act of patient lifting, transferring, or repositioning creating an ergonomic hazard. Assistive patient handling equipment and devices control this hazard by technologically engineering out the energy/force from the job task experienced by the nurse. Application of assistive patient handling technology fulfills an ergonomic approach by designing and fitting the job or workplace to match the capabilities and limitations of the human body.

The use of equipment and devices should not be viewed as the exclusive solution to prevent back injuries and musculoskeletal disorders among nurses, but rather only as a component of a comprehensive safe patient handling or patient care ergonomics program. Essential elements of such a program include a "No (Manual) Lift" policy (that is non-punitive and represents a commitment on behalf of management to provide staff with appropriate measures to avoid manual patient handling), a thorough ergonomic hazard assessment that covers high risk units or areas, investment in equipment, care planning for patient handling and movement, training for staff, and a review and evaluation process. While technologic solutions have been a key and necessary aspect of safe patient handling programs, optimal effectiveness can only be achieved with these complementary pieces. Instituting a safe patient handling program should be systematically and methodologically approached. As an example of a model program, the ANA has incorporated the Patient Care Ergonomics Resource Guide developed by the Tampa VA Patient Safety Center ([Patient Safety Center, 2001](#)).

Partnerships

A key to moving forward an initiative such as Handle With Care® is the formation of partnerships. In collaboration with ANA-related groups, state nurses associations, specialty nursing organizations, the research and academic community, and health care systems, ANA facilitates the sharing and dissemination of information with the intent of building a critical mass of momentum to create change. The creation of a network of groups that agree with the fundamental principles of the campaign is essential to put forward a common message that reaches a wide audience. Organizations have begun crafting resolutions, adopting policy stances, providing presentation opportunities, and utilizing channels of communication to their members and other groups.

A principal partner for the campaign is the Tampa Veterans Health Administration Patient Safety Center of Inquiry (www.patientsafetycenter.com). Under the leadership of Audrey Nelson, PhD, RN, FAAN, this research laboratory is the nation's leading center that studies safe patient handling. Through innovative work in investigating the adverse effects of injury of manual patient handling to both patients and nursing personnel, the Center has developed several resources that can be used to support the implementation of a safe patient handling program in health care institutions, including an ergonomic hazard assessment tool for health care settings, safe patient handling algorithms, an evaluation of lifting equipment and devices, and an example of a No Lift policy. All of these and more are contained in the Patient Care Ergonomics Resource Guide that is available on-line at no cost ([Patient Safety Center, 2001a](#); [2001b](#)). Additionally, the ANA, Tampa Veterans Health Administration Patient Safety Center of Inquiry, and the University of South Florida, co-sponsor the Annual Safe Patient Handling and Movement Conference, typically held in Florida in early March every year. This meeting features presentations from national and international experts on health care ergonomic hazards, health care organizations with successful safe patient handling programs, specialists on the economics of safe patient handling, leaders in health policy, evaluators of safe patient handling equipment and devices as well as vendors and manufacturers.

Education and Training

As the Handle With Care® campaign moves forward, an important component is the education and training of both front-line nurses and health care employers (e.g., hospital administrators, chief executive officers). Effective creation of change to value and apply an ergonomic perspective to patient handling is dependent on the knowledge possessed by those in positions to demand and support it. Training workshops geared towards front-line nursing personnel review fundamental topics of safe patient handling, the impact of back injuries on the nursing shortage, the myth of "proper" body mechanics, assessment of ergonomic hazards in the health care work setting, and the use of engineering controls (patient lifting equipment and devices). Front-line staff can take the information to advocate for and work towards improvements in their own work settings (i.e., through health and safety committees, collective bargaining).

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Using Assistive Equipment

Because administrators (or executive leadership) within health care organizations possess decision-making authority, the Handle With Care® campaign includes an outreach effort that involves a brochure explaining the economic argument of adopting a safe patient handling program. Amidst concerns rooted in shrinking budgets and financial resources, these decision-makers must be made aware of the cost-savings that can be realized as a function of preventing back and other musculoskeletal injuries by using mechanical equipment, aides, and devices. A common response to the idea of purchasing safe patient handling equipment is that it is cost-prohibitive and that budget constraints cannot accommodate the investment. A programmatic approach, though, that includes the use of patient handling equipment results in a dramatic reduction in costs for treatment and workers' compensation claims as well as other indirect costs related to replacing staff, training new staff, modified duty, and patient injury. Appealing to their interest using an economic argument has been identified as a critical piece to ensure that health care administrators are convinced that the use of patient handling equipment and devices is a sound investment to prevent injuries and reduce injury-related costs.

Reshaping Nursing Education for Safe Patient Handling

A dimension of the Handle With Care® campaign seeks to explore ways to modify how student nurses are taught patient handling. So-called "proper" body mechanics have been historically and continue to be taught in nursing schools as a means to counteract the physical stress of manual patient handling, such as lifting. Traditional body mechanics, though, do not translate well to nursing practice. Early findings of body mechanics studies were based on static loads (i.e., a box 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.

Overall, body mechanics training does not equip nursing personnel with the capabilities to effectively compensate for loads that typically exceed recommended limits ([Nelson et al., 2003](#)).

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...handling safe and ergonomically sound are now available.

Conventional education of patient handling at the training level continues to be based on manual (e.g., "hook and drag") and multi-person techniques (e.g., two-person lift). Persistence of this practice in the education of nursing students perpetuates outdated approaches and contributes to the considerable

number of work-related musculoskeletal disorders that continue to occur among newer members of the nursing workforce. Considering emerging scientific research, technologic innovation, and exemplary application in real work settings, methods that make patient handling safe and ergonomically sound are now available. Providing these methods to schools of nursing to incorporate in education and training curriculum is viewed as a critical dimension to preventing the future incidence of musculoskeletal disorders among nurses. By directing efforts during the influential "learning stage" the campaign seeks to catalyze a sorely needed philosophical transformation with respect to patient handling among the prospective nursing workforce. Empowering nursing students with the foundational value and appreciation for the recognition and prevention of ergonomic hazards can have far-reaching effects particularly as they take on leadership roles throughout the variety of health care settings, such as hospitals and nursing homes.

National Policy

On November 14, 2000, the U.S. Department of Labor Occupational Safety and Health Administration (OSHA)

issued a final ergonomics rule that would have protected health care workers ([OSHA, 2000](#)).

Opponents of the rule made claims that ergonomics does not have a scientific basis and employers would incur overwhelming financial costs to ensure compliance with its stipulations. Garnering congressional support and landmark use of the Congressional Review Act, opponents successfully moved forward a resolution (S.J. Res. 6) to repeal the OSHA ergonomics standard ([Boehner, 2001a](#)), which was promptly signed by President George W. Bush ([Boehner, 2001b](#)).

Bush, himself, explained that this Congressional action was used effectively to repeal a costly and overly burdensome regulation that would have cost employers billions while possessing uncertain benefits ([Bush signs, 2001](#)). A condition of this repeal is that OSHA is barred from pursuing development of another ergonomics standard unless ordered so by Congress with agreement of the Executive Branch ([see Table 3](#) for a summary timeline of OSHA ergonomics regulation). Absent regulatory activity related to ergonomics, OSHA has published industry-specific ergonomic guidelines, including one specifically for Nursing Home Personnel ([OSHA, 2004](#)). These guidelines, in contrast to a standard, are not enforceable, such that employers are not required to comply with them nor can an OSHA citation be issued based on the guidelines.

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July 31, 1991:	ANA, along with other labor organizations, petitions federal OSHA for an emergency temporary standard, "Ergonomic Hazards to Protect Workers from Work-Related Musculoskeletal Disorders (Cumulative Trauma Disorders)."
November 23, 1999:	In response to ANA's ongoing appeals, OSHA issues proposed ergonomics standard (29 CFR Part 1910 Ergonomics Program; Proposed Rule).
November 14, 2000:	OSHA promulgates and finalizes ergonomics standard (29 CFR Part 1910 Ergonomics Program; Final Rule).
March 20, 2001:	President George W. Bush signs legislation killing the OSHA ergonomics standard.
June 21, 2003:	ANA Board of Directors adopts a position statement on "The Elimination of Manual Patient Handling to Prevent Work-Related Musculoskeletal Disorders."
September 17, 2003:	ANA President Barbara Blakeney officially launches the "Handle With Care® " campaign.

The international nursing community has long recognized manual patient handling as a true occupational hazard. Several nursing associations across the world have taken initiative, often in response to government regulation, to present positions or policies concerning the act of manual patient handling. At the forefront of the global safe patient

handling movement, the United Kingdom and Australia have published official stances on the matter. The United Kingdom's Royal College of Nursing (RCN) issued its *Code of Practice for Patient Handling* in 1996. The Code offered a framework for implementing a government standard adopted in 1992 (revised in 1998) titled, "Manual Handling Regulations" that covers health care workers ([Royal College of Nursing, 2002](#)). The aim of the policy is to eliminate manual handling in all but exceptional or life-threatening situations, orders that manual patient handling may only be done if it does not involve lifting all or most of the patient's weight, and calls for the use of handling aides to reduce the risk for injury. The Australian Nursing Federation (SA Branch) adopted a "No Lift, No Injury" policy in March 1998. Much like the RCN, the central tenet of the policy calls for the elimination of the manual handling of people in all but exceptional or life threatening situations and states that manual assistance may only continue if it does not involve lifting most or all of a client's weight. An additional component of this policy is the establishment of a training program and resource network to disseminate knowledge about safe handling efforts ([Australian Nursing Federation, 2004](#)).

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With the lack of a federal regulation that addresses workplace ergonomic hazards, an alternative approach has been to pursue state-based regulation or legislation. Certain states may be politically amenable to specific mandated worker protections countering resistance to advance national-level regulation or legislation. Establishing momentum for an issue that exhibits support from multiple states serves as a means to build a "ground-swell" up to the federal level and be the impetus for a federal initiative. To illustrate this, the federal Needlestick Safety and Prevention Act of 2000 ([PL 106-430, U.S. Congress,](#)

[2000](#)) was introduced and passed only after seventeen states, starting with California ([California State Legislature, n.d.](#)), had passed their own needlestick safety legislation ([ANA, n.d.](#)). Supporting state nurses' associations and state-based coalitions in such efforts was a major component of ANA's Safe Needles Save Lives campaign during the mid- to late-1990s ([ANA, 2002](#)).

The Handle With Care® campaign seeks the same strategy for safe patient handling/ergonomics regulations that covers the health care workers. Currently, work to identify and craft model legislative language has been prioritized to assist those organizations and legislators that are interested in pushing forward at the state level. Identifying states primed to take on this pursuit accompanies this effort. Additionally, ANA has provided direct support for state ergonomic regulations. In the state of Washington, the Department of Labor and Industries adopted a rule to reduce work-related musculoskeletal disorders on May 26, 2000 (to be effective on July 1, 2002 with incremental phase-in through 2006) that applied across all industries ([Washington State Department of Labor and Industries, 2000](#)). The rule explicitly pointed out "heavy, frequent or awkward lifting" as a criterion for compliance, and nursing and personal care facilities were identified as high risk workplaces for which this rule was intended. A voter initiative I-841 to repeal the rule was spearheaded by the Building Industry Association of Washington which claimed that cost estimates to implement the rule ranged from \$80 to \$800 million and that jobs would have to be eliminated as a result ([Queary, 2003](#)). ANA became heavily involved in supporting the Washington State Nurses Association (WSNA) who advocated against I-841 as part of the Washington State Labor Council to preserve the ergonomics rule. After a media battle for which proponents of I-841 overwhelmingly outspent the Washington State Labor Council, I-841 passed by a 53% to 47% margin on November 4, 2003 eliminating the ergonomics rule ([Washington State Department of Labor and Industries, 2003](#)). Further, I-841 contained a stipulation that the state Department of Labor and Industries is disallowed from working on any type of similar rule unless ordered by the state legislature. As other state bills are being introduced and promoted across the country, ANA continually explores ways to offer assistance and content expertise to support such efforts (see California Assembly Bill 2532 on Lift Teams as of 5/5/2004) [<http://www.leginfo.ca.gov/bilinfo.html>] (choose "Both," enter "2532").

Benefits

Reduction in Nurse Injuries

A growing number of health care facilities have incorporated safe patient handling programs with technology solutions and have reported positive results ([Evanoff, Wolf, Aton, Canos, & Collins, 2003](#); [Haiduven, 2003](#); [Hefti et al, 2003](#); [Hignett, 2001](#); [Holliday, Fernie, & Plowman, 1994](#); [Mutch, 2004](#); [Owen, Keene, & Olson, 2002](#); [Yassi et al, 2001](#)). Injuries among nursing staff have dramatically declined since incorporating patient handling equipment and devices along with an institutional commitment to the safest available methods. In a work environment that values an ergonomic approach and applies a formal program, nurses are provided a safe workplace in which to practice without the

threat of injury. Additional benefits include decreased fatigue, increased job satisfaction, not working in pain, and sustainability of professional careers.

Cost-Savings for Employers

Costs associated with occupational injuries are often more than most realize. As worker injuries decline, both direct and indirect costs associated with these injuries decrease. Cost-benefit analyses have shown that assistive patient handling technology successfully reduces workers' compensation and medical treatment costs for musculoskeletal disorders ([Collins & Bell, 2003](#); [Garg, 2003](#); [Nelson et al. 2003](#); [Owen & Fragala, 1999](#)). Savings are viewed as a function of eliminating indirect costs such as time for investigation, lost work days, loss of productivity, modified duty time, replacement of injured employees (turnover), education and training of new hires, liability costs from possible patient injury, overtime pay to those covering shifts and workload, and other operational costs. Case examples have revealed that employers have saved tens to hundreds of thousands of dollars after implementing a safe patient handling program ([Collins, Wolf, & Hsiao, 2002](#); [Fragala, 1995](#); [Nelson, Fragala, & Matz, in press](#)).

Cost-benefit analyses have shown that assistive patient handling technology successfully reduces workers' compensation and medical treatment costs for musculoskeletal disorders.

Quality Patient Care

While the use of assistive patient handling equipment and devices is endorsed as a way to create a safe environment of care for nursing staff, it is necessary to highlight the significant advantage to patients. Patient handling technology has uplifted the level of quality nursing care delivered. Increased safety, comfort, and dignity have been identified as the primary benefits for patients. Assistive equipment and devices provide a more secure process for lifting, transferring, or repositioning tasks reducing the potential for patient injury (i.e., falls, skin tears, shoulder dislocations) as a consequence of a manual patient handling mishap. Patients are less subjected to awkward or forceful handling potentially experienced when lifting, transferring, or repositioning is done manually. 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 mechanical equipment. The use of assistive equipment protects patient dignity, especially since a patient's self-esteem and privacy can be compromised during difficult patient handling situations when performed manually. Further safe 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.

Conclusion

Nurses should not have to manually lift, transfer, or reposition patients. In reviewing the availability and success of safe patient handling programs that use mechanical equipment and devices, there is no reason for why the American health care industry has not achieved a state in which exposure to ergonomic hazards, particularly with respect to patient handling, is effectively controlled. The benefits of adopting a safe patient handling or patient care ergonomics program for employees, employers, and patients have been clearly demonstrated and are difficult to argue. There continues to be a need to educate all members of the health care industry about innovative programmatic and technologic solutions that effectively reduce the risk of injuries among nurses and other patient care providers. Through the Handle With Care® campaign and its various components, the ANA hopes to help transform current patient handling practices as well as encourage awareness of the dangers of ergonomic hazards in the health care workplace.

Nurses should not have to manually lift, transfer, or reposition patients.

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***Note:** Handle With Care® is a registered trademark. This article was modified to reflect this trademark on 7/20/06.

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Article published September 30, 2004

de Castro, A.B. (September 30, 2004). "Handle With Care®: The American Nurses Association's Campaign to Address Work-Related Musculoskeletal Disorders". *Online Journal of Issues in Nursing*. Vol. #9 No. #3, Manuscript 2. Available: www.nursingworld.org/ojin

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