



2.0
CONTACT HOURS

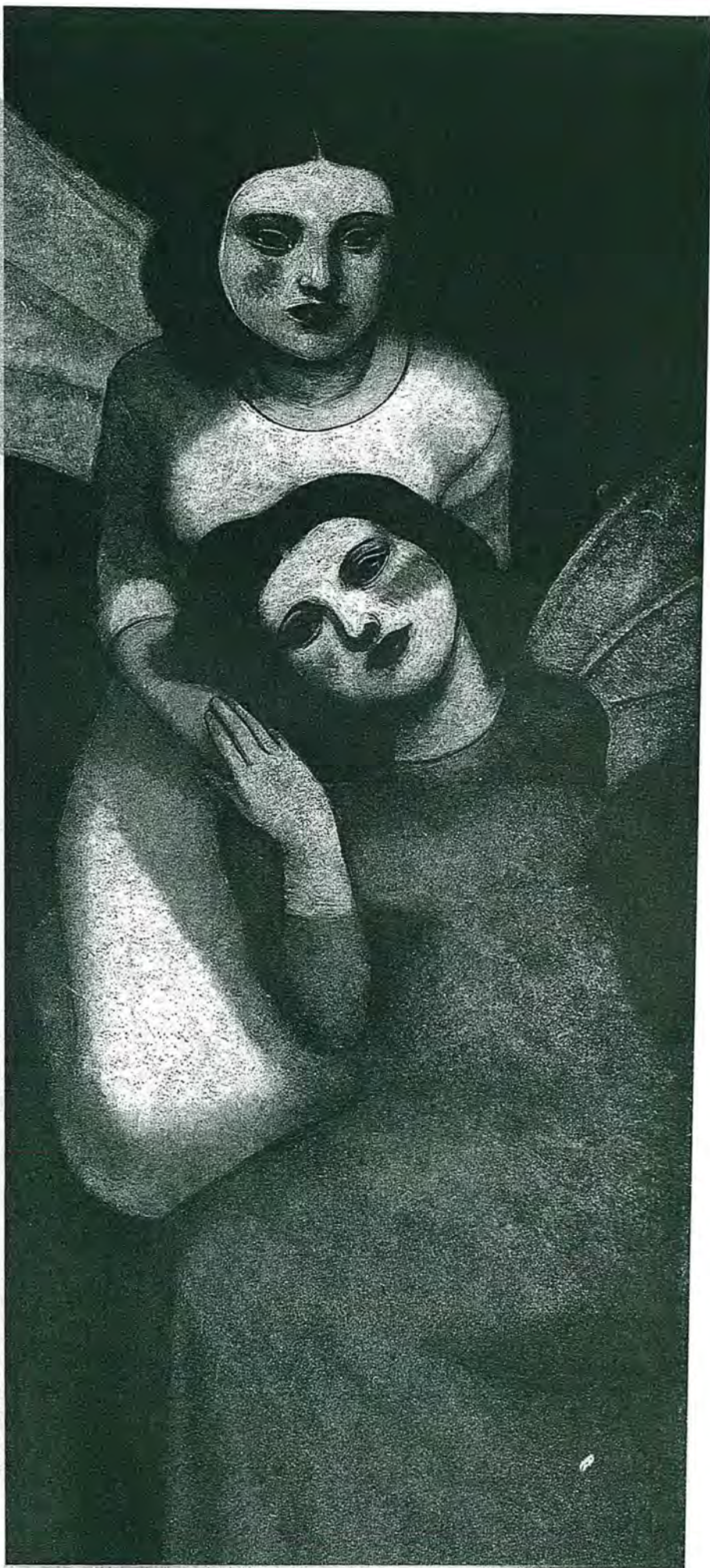
Sort through the myths and facts to determine how you uphold best practices for patient lifting.

By **Audrey L. Nelson, RN, PhD, FAAN, James Collins, PhD, MSME, Hanneke Knibbe, MSc, RPth, Ken Cookson, RGN, RMN, DipRSA, A.B. de Castro, RN, MSN/MPH, PhD, and Kevan L. Whipple, PT, DPT, OCS, STS, CEAS**

Respite the staffing shortage and concerns that nursing is a risky profession, progress has been slow in the United States to reduce work-related injuries associated with patient handling tasks. Between 1989 and 2001, the change in the number of U.S. lost-workday injury cases per 100 full-time nurses was minimal; in 1989 it was 4.0, compared with 3.8 in 2001.¹ We're starting to see these numbers decrease, with 3.3 reported in 2004.² In other countries where safe patient handling policies are supported by regulations, more significant declines in nursing musculoskeletal injuries are noted.^{3,4}

Patient handling tasks are considered high-risk, due to the magnitude of weight lifted, awkwardness and unpredictable nature of the load lifted (patient), and sustained awkward positions used to provide nursing care, such as bending over beds or chairs while the back is flexed. Consider this: The cumulative weight lifted by a nurse providing direct patient care in a typical 8-hour workday is estimated to be 1.8 tons.⁵ Unfortunately, nurses accept back pain as part of their job, with 52% to 63% of nurses reporting musculoskeletal pain that lasts for more than 14 days; in 67% of cases pain was a problem for at least 6 months.⁶

Pierre Mornet



Safer patient handling

Internationally, the newest approach to this serious occupational problem has been the use of safe patient handling policies—at the facility level, state level, or national level. There's significant confusion about what a safe patient handling policy is and whether it's practical to implement such a policy in the United States.

Countering the misconceptions

Let's examine this issue from an international perspective, addressing lessons learned from other countries.

Myth #1: The definition of a patient handling policy is clear, and all patient handling policies are essentially the same.

Fact: A safe patient handling policy (also referred to as "no-lift," "zero-lift," "minimal lift," "no-manual lift," or "lift-free") is one part of a comprehensive approach to preventing musculoskeletal injuries to healthcare workers.⁷ The wide variety of names has led to confusion about how healthcare providers interpret the intent of safe patient handling policies.

Some healthcare professionals believe this policy means that patients should never be physically lifted, while others believe this means that patients should never be manually lifted except in emergency or exceptional situations. Still others interpret a safe patient handling policy to mean that patients are to be moved with the assistance of appropriate equipment, when certain limits for manual handling are exceeded.

The purpose of a written safe pa-

tient handling policy is to provide a clear understanding of the elements of a safe patient handling and movement program, to define the roles and responsibilities for all affected staff (healthcare administrators, supervisors, frontline caregivers, therapy staff, maintenance personnel, and house-keeping staff), and to provide a reference for review when questions arise.⁷

Safe patient handling policies are undergoing an evolutionary process throughout the world, and include facility-based policies as well as state and national legislation efforts. The first safe patient handling policy in the United Kingdom stated that manual lifting of patients was to be eliminated in all but exceptional or life threatening situations.⁸ (Manual patient handling is defined as transporting or supporting of a patient by hand or bodily force, including pushing, pulling, carrying, holding, and supporting of the patient or a body part.) Over time the safe patient handling policy came to include the following key points, when adopted by Canada, Australia, and the Netherlands:

- ◆ Patients should be encouraged to assist in their own transfers, and handling aids must be used whenever they can help to reduce risk, if this isn't contrary to a patient's needs.
- ◆ Manual lifting may only be continued if it doesn't involve lifting most or all of a patient's weight, such as when a patient only needs minimal assistance. Many high-risk manual handling tasks have been banned, including the "Hook and Toss Method" commonly taught here in the United States.

- ◆ A safe patient handling policy doesn't mean healthcare providers will never transfer or reposition a patient manually, but rather the determination of how a patient is to be transferred should be based on the patient's physical and cognitive status and medical condition.

- ◆ Proper infrastructure must be in place before a safe patient handling policy can be enforced. Infrastructure is defined as management commitment and support, availability of equipment, equipment maintenance, employee training, resources for advanced training, and culture of safety.

- ◆ The culture of safety approach includes the collective attitudes of employees and managers at all levels taking a shared responsibility for safety in the work environment and for providing a safe environment for themselves and the patients.

- ◆ Ergonomic assessments should be conducted for high-risk tasks to determine the safest way to perform the task; the assessment and solution must be communicated to all staff.⁹⁻¹²

Safe patient handling policies were briefly recommended in the United Kingdom about 10 years ago.¹³ They actually implied a culture of safer lifting rather than no manual lifting, although some individual organizations (in particular social and home care services) interpreted these policies as no lifting under any circumstances. This caused problems for service provision, and, more recently, the interpretation has been explored legally. Many healthcare and social care employers in the United Kingdom are now re-

viewing their safe patient handling policies following a complex human rights legal case.

The judge found that a lifting policy that imposed a blanket proscription on all manual handling was likely to be unlawful. This position is reinforced by the Health and Safety Executive warning against no-lifting policies.¹⁴ The result of this case has emphasized the need for balanced decision making, based on risk and patient assessments. In the United Kingdom, good practice for routine lifting is likely to use equipment, but in an emergency caregivers would be expected to use manual lifting. It's particularly important to document the decision making in the risk and patient assessments to show how the decision has been reached, rather than just the final decision.¹⁵

Myth #2: A safe patient handling policy is intended as a punitive tool.

Fact: Safe patient handling policies are designed as a pledge from administrators to protect nursing staff. The purpose of the policy isn't punitive; it's a declaration of support from both staff and administration. This policy establishes expectations that staff will use the safest techniques to accomplish high-risk patient handling tasks, and that administrators will provide equipment and resources to support staff efforts.¹⁶

Myth #3: The United States is an international leader in implementing safe patient handling policies to protect nursing staff.

Fact: Several countries have implemented national safe patient handling policies. The United Kingdom initiated efforts to establish a safe patient handling policy on a national scale in 1992. In 1996, clinical guidelines were introduced by the Royal College of Nursing, credited with the first "lift-free hospital." In 1994, the Nordic Council (Denmark, Sweden, Norway, and Finland) developed force limits for patient handling, citing that the maximum patient weight to be lifted by a nurse is 54 pounds. Canada and Australia have followed with national and regional initiatives. The Netherlands issued national

no-lift guidelines with a wide commitment from unions, employers, the Labour Inspectorate, and the two Ministries (Health and Social Affairs) in 2001.¹¹ The guidelines are based on European legislation.

The movement toward safe patient handling policies is gaining momentum in the United States, becoming a focal point in safe patient handling programs through leadership efforts in the Veterans Health Administration (VHA) and American Nurses Association (ANA). The VHA identified evidence-based approaches and developed a multifaceted program tested across several hospitals.¹⁷

Building on the work at the VHA, in 2003, the U.S. Department of Labor, Occupational Safety and Health Administration released ergonomics guidelines for nursing homes to reduce the number and severity of work-related musculoskeletal disorders. These serve as advisory recommendations rather than an enforceable standard. Specific recommendations include:

- ◆ Manual lifting of residents should be minimized in all cases and eliminated where feasible.
- ◆ Employers should implement an effective ergonomics process that provides management support, involves employees, identifies problems, implements solutions, addresses reports of injuries, provides training, and evaluates ergonomics efforts.¹⁸

The ANA developed a program, "Handle with Care," that supports safe practices for patient handling.¹⁹ Although there's no national legislative or regulatory action in this area within the United States, one national bill is pending—HR 378 "Nurse and Patient Safety and Protection Act of 2007."

Six states—Texas, Washington, Hawaii, Rhode Island, Ohio, and New York—have recently passed legislation related to safe patient handling. At least five other states—California, Massachusetts, New Jersey, Illinois, and Florida—have introduced legislation, though some bills have been defeated with po-

tential plans by states to reintroduce. Several more states are drafting language for introduction of safe patient handling legislation.

Myth #4: Implementing a facility-based safe patient handling policy isn't feasible in the United States.

Fact: Many U.S. healthcare facilities have successfully implemented safe patient handling policies, resulting in significant reductions in injuries to caregivers and becoming an essential part of a comprehensive Safe Patient Handling and Movement program.^{16,20,21} The effectiveness of safe patient handling policies has been documented through research in diverse settings in private and government-owned hospitals and long-term care facilities. The U.S. Department of Veterans Affairs successfully implemented safe patient handling policies as an integral part of comprehensive Safe Patient Handling and Movement programs in acute care hospitals and long-term care facilities.^{16,22} Similar findings were obtained in studies conducted by the National Institute for Occupational Safety and Health and BJC Health Care in long-term care facilities.²¹

The safe patient handling policy is one part of a comprehensive approach to preventing musculoskeletal injuries to healthcare workers. Prior to implementing the policy, the hospital or nursing home should have the following elements in place:

- ◆ a sufficient amount of mechanical lifting equipment and repositioning aids
- ◆ adequate number of staff trained and competent in the use of the equipment in each high-risk unit and staff skilled in applying safe patient handling and movement algorithms
- ◆ sufficient working space
- ◆ administrators and supervisors who support the safe patient handling policy and safe patient handling and movement program.¹⁶

The policy communicates in writing the responsibilities of all medical, maintenance, and administrative staff with regard to the safe handling and movement of patients. The policy is nonpuni-

tive and establishes methods to evaluate the transfer needs of patients, procedures to avoid hazardous patient handling and movement tasks, and delineates the responsibilities of frontline caregivers, nurse managers, therapists, maintenance personnel, supervisors, and administrators. In addition, a safe patient handling policy should include the following points:

- ◆ program goals for reducing worker musculoskeletal injuries and improving care quality
- ◆ review of injuries to staff and patients associated with patient handling and an assessment of the patient care environment to determine equipment requirements and potential workplace modifications
- ◆ roles and responsibilities of the administrator, nurse managers, maintenance and housekeeping staff, and frontline caregivers who perform patient lifting
- ◆ patient handling and movement algorithms to classify patients based on transferring needs, and the type of equipment required to safely move and transfer patients
- ◆ definitions of content-specific training and education requirements for affected staff
- ◆ training schedules during orientation and when there's a job, equipment, or process change, and annual refresher sessions
- ◆ descriptions of methods to communicate the correct type of transfer to the frontline caregiver
- ◆ resources available for lifting equipment, slings, batteries, repositioning aids, and bathing equipment that'll be required to establish a safe patient handling and movement program
- ◆ infection control strategy
- ◆ specific maintenance and inspection schedules for lifting equipment and repositioning aids, slings, batteries, and accessories, and tag out procedures for damaged equipment
- ◆ procedures and equipment recommendations for handling bariatric and other special needs patients

◆ procedures for evacuating patients in an emergency.^{7,16} (See "Sample safe patient handling policy for hospitals/nursing homes.")

Myth #5: Safe patient handling policies are too costly to implement properly.

Fact: Several studies have shown that the initial capital investment in a safe-lifting policy and the equipment required to establish a safe patient handling and movement program can be recovered in 2 to 3 years.²¹⁻²³ Similarly, in the Netherlands the results reported in 2001 showed a break-even point after 2 years.²⁴

The initial capital investment to purchase or lease equipment can be substantial depending on the needs of the healthcare organization and the extent and sophistication of equipment selected. Healthcare organizations can choose to phase-in equipment incrementally to work within limited budgets. Implementation of a safe patient handling and movement program in nursing units identified as high risk can provide proof of the program's success, which can facilitate replication of the program in other units.

Risk assessment is an important first step in establishing an effective prevention program. An overall assessment of the entire organization is required. A sound assessment will highlight problem areas and the reasons why the level of risk is high. It may be related to shortfalls in equipment, ergonomic and design implications, or handling procedures. Manual handling incidents in a particular ward may be due to the types of patients, inadequate equipment levels, or lack of training.

It's worthwhile to thoroughly assess the baseline facts to present a strong business case to management. Your goal is to convince managers that reducing musculoskeletal injuries will be beneficial as well as cost effective for the organization.²⁵ It's useful when presenting the business case to be able to cite other organizations that have implemented a safe patient handling policy. Some interesting and successful case studies are available at [http://](http://www.hse.gov.uk)

www.hse.gov.uk.

Examining the cause for lost workdays and modified workdays can provide strong factual evidence to present a robust business case to managers and financial directors. Although there's a significant initial cost to implementing safe patient handling policies (mainly from developing the infrastructure and purchasing equipment such as patient hoists), the potential benefits that follow far outweigh the initial cost.

There's overwhelming evidence to show that manual handling incidents and employee lost workdays decrease after safe patient handling policies are implemented. In addition, these policies improve staff morale, increase staff efficiency for managers, yield cost savings for healthcare facilities, and most importantly, provide better care and a safer environment for patients.

Myth #6: Workers involved in moving or transferring patients will be protected from back injuries if they use "good body mechanics" or "manual lifting techniques."

Fact: There's no scientific evidence to support training in "body mechanics" or "manual lifting techniques" as an effective strategy to protect nurses against back and other musculoskeletal injuries.²³ Although the first citation for the phrase "body mechanics" in nursing appeared in 1945, there was no scientific evidence to support this approach. However, lacking any evidence-based alternative, yet facing the need to teach students how to lift and move patients, schools of nursing have taught body mechanics and manual lifting techniques for the past 100 years and continue to teach these methods today.

Unfortunately, the "bent knee, straight back" method of lifting doesn't apply to lifting patients. When a patient is being lifted from a bed or chair, the placement of the patient requires awkward postures and excessive forward bending, while at the same time, a bed or chair can restrict the nurse's ability to bend his or her knees. Other factors that can contribute to the difficulty of lifting a patient

are the size and weight of the patient, the patient's propensity to fall or lose balance, the bed height, patient resistance or combativeness, and the fact that 90% of the lifting and moving of physically dependent patients is performed by female nursing staff, who lack the body strength of men.²⁶

A body of research knowledge has been developed that provides strong evidence that a comprehensive program can significantly reduce the risk of musculoskeletal injuries in healthcare settings.^{17,21,22,27,28} Common elements of these successful programs are mechanical equipment to assist caregivers with resident lifting tasks, training in the use of the equipment, and a written safe patient handling policy.

Potential benefits of revised procedures

Reports show that safe patient handling

policies, as part of a comprehensive program, resulted in significantly less risk for musculoskeletal injuries for nursing staff, particularly back pain.^{3,23,29-33} Lost workdays due to injury and light duty assignments among nursing staffs will also be reduced, preserving their ability to work as frontline patient care givers.³⁴ Also, the career of a nurse is less likely threatened to be cut short as a result of injury. In addition, individuals may be more interested in pursuing a career as a frontline nurse if they're less worried about the risk of suffering a work-related injury. Further, a safe patient handling policy contributes to creating an overall culture of safety within the healthcare organization.

In addition to benefits to nursing staff, mechanical lifting equipment can reduce the risk of patient injury due to falls, and bruises or skin tears that may

result from manual handling. Patients are subjected to less uncomfortable, awkward, or forceful handling when lifting, transferring, or repositioning is done with a mechanical lift.³⁵ This can be especially important for patients with high-acuity conditions, with complex pain management, or those who are elderly or frail.

Additionally, patient dignity and privacy may be compromised during difficult manual handling tasks. Equipment can offer a more considerate way of handling patients that safeguards respect. Also, assistive patient handling equipment can be selected to match a patient's ability to assist in his or her own movement, thereby promoting patient autonomy.

Indirect cost savings can also be realized because healthcare organizations will replace fewer injured employees, train fewer new hires, have fewer nurses

Sample safe patient handling policy for hospitals/nursing homes

Purpose and scope of the policy

(Facility name) safe patient/resident handling policy is one part of a comprehensive program to prevent musculoskeletal injuries to frontline caregivers, one of our most valuable resources. The policy recommends guidelines to ensure that the transferring needs of all patients/residents are assessed. All healthcare personnel responsible for transferring patients shall be aware and trained on the correct procedures for lifting and moving patients. Adherence to this policy ensures that patients/residents are being lifted and transferred safely while encouraging patient mobility and independence.

Staff responsibilities

The *administrator* is responsible for:

- Supporting the implementation of this policy.
- Providing training opportunities for all staff affected by the safe-lifting policy.
- Furnishing sufficient lifting equipment and repositioning aids.
- Identifying acceptable storage locations for lifting equipment and repositioning aids.
- Providing resources for the medical management program and the evaluation of the safe-lifting program.

The *unit/nurse manager, the physical and occupational therapy departments, and frontline caregivers* are responsible for:

- Assessing the transferring needs of each patient and prescribing lifting and transferring method(s) that are consistent with the patient's care plan and rehabilitation goals and their ability to ambulate, bear weight, and follow verbal instructions. Patients should be reassessed if their condition changes.

Unit/nurse manager and supervisors are responsible for:

- Ensuring that all staff affected by the policy complete initial and annual training.
- Ensuring that the transferring needs of patients are assessed and all high-risk patient-handling tasks are completed safely using mechanical lifting devices or other appropriate equipment or techniques.
- Ensuring that mechanical lifting devices, slings, and other equipment are available, maintained in proper working order, and stored conveniently and safely.
- Ensuring that patient transfers are being performed as prescribed.
- Maintaining training records.

Nursing staff and frontline caregivers are responsible for:

- Being knowledgeable of the procedures to follow when transferring patients.
- Using proper techniques, mechanical lifting devices, and other approved equipment/aids when performing high-risk patient handling tasks.
- Notifying supervisor if a change has occurred in a patient's condition.
- Notifying supervisor if you have a need for retraining in the use of mechanical lifting devices, other equipment/aids, and lifting/moving techniques.
- Notifying supervisor if mechanical devices, slings, or equipment/aids are damaged or need repair.
- Notifying supervisor of any injury sustained to staff or patients.

Maintenance personnel are responsible for:

- Inspecting the patient lifting equipment, slings, and batteries each month.
- Maintaining lifting devices and other equipment in good working order.
- Establishing procedures for removing damaged equipment from service.

Patient assessment

The transferring needs of each patient should be assessed and the most appropriate lifting and transferring method(s) should be prescribed based on the patient's rehabilitation goals and ability to ambulate, bear weight, and follow verbal instructions. Patient algorithms should be used to assess a patient's transferring needs and to identify the most appropriate methods to lift and move the patient.

Workplace assessment

The patient care environment should be assessed to examine the layout of patient care rooms, bathrooms, and bathing areas to identify factors that might contribute to patient handling incidents, such as furniture that might interfere with transfers, the adjustability of bed height, the size of the bathrooms and bathing areas, and physical barriers such as thresholds that aren't level with the floor that might restrict the movement of lifting equipment.

Training requirements

Training should be provided to all staff affected by the safe patient lifting program; this should include administrators, nursing staff, physical and occupational therapists, maintenance staff, and housekeeping and laundry staff. All nursing staff and caregivers who lift and transfer patients should be trained and made competent in the use of patient lifting equipment and the procedures to follow while transferring patients.

on restricted work duties, reduce the need to cover nursing shifts by paying overtime, spend less time and resources to investigate injury incidents, and reduce liability costs from patient injuries.

Healthcare administrators and staff members can work together to locate resources of information for vendors of mechanical lifting equipment and/or no-lift programs that suit their specific needs. **NM**

REFERENCES

1. Bureau of Labor Statistics. Number of non-fatal occupational injuries and illnesses by industry and selected case types (2000). Available at: <http://www.bls.gov>. Accessed March 12, 2004.
2. Bureau of Labor Statistics. Occupational industries and illnesses: industry data (1989-2001). Available at: <http://www.bls.gov/data/archived.htm>. Accessed July 23, 2004.
3. Knibbe JJ, Friele RD. The use of logs to assess exposure to manual handling of patients, illustrated in an intervention study in home care nursing. *Int J Industrial Ergon*. 1999;24(4):445-454.
4. Health and Safety Executive. Case studies updated 12.2.04. London, UK: HSE; 2004. Available at: <http://www.hse.gov.uk/healthservices/casestudy.htm>. Accessed March 16, 2004.
5. Tuohy-Main K. Why manual lifting should be eliminated for resident and carer safety—and how. *Geriatrician*. 1997;15:10-14.
6. Vasiladou A, Karvountzis GG, Soumilas A, Roumeliotis D, Theodosopoulou E. Occupational low-back pain in nursing staff in a Greek hospital. *J Adv Nurs*. 1995;21(1):125-130.
7. Collins JW. Safe lifting policies. In: Nelson A, ed. *Safe Patient Handling and Movement: A Practical Guide for Health Care Professionals*. New York, NY: Springer Publishing Company, Inc.; 2006:151-159.
8. Royal College of Nursing. *Code of Practice for Patient Handling*. London, UK: RCN; 2000.
9. Australian Nursing Federation (Victorian Branch) No Lift Policy, 1998. Available at: http://www.sa.anf.org.au/guest/benefits/oh_s.asp. Accessed July 26, 2004.
10. British Columbia Interior Health Authority. A Practice Guide to Resident Handling: Section 2—No Lift Policy, 2003. Available at: <http://www.interiorhealth.ca/Media+Centre/Documents/MSIP.htm>. Accessed March 12, 2004.
11. Practice Guidelines: Health Care/Health Care Sector Funding. Utrecht, the Netherlands: Ministries of Health and Social Affairs; 2001.
12. Retsas A. Barriers to using research evidence in nursing practice. *J Adv Nurs*. 2000;31(3):599-606.
13. Tracy M. Campaign for safer patient handling. *Occupational Health*. 2001;48(2):50-52, 75.
14. Health and Safety Executive. *Health and Safety Statistics for 2001/02*. HSE: London, UK, 2002.
15. Mandelstam M. Case file: a quarterly analysis of recent cases, other legal developments and their implications. *The Column*. May 2003;15.2:15,18-21. National Back Exchange Towcester, Northamptonshire, UK.
16. Nelson A, ed. 2001 (rev. 11-20-03). *Developing a No Lift Policy*. Tampa, Fla: Department of Veterans Affairs VISN 8 Patient Safety

Training should be provided during employee orientation, and whenever there's a change in job assignment, equipment, or procedures. Refresher training should be conducted annually and upon the request of staff.

Equipment requirements

The employer will provide mechanical patient lifts, slings, batteries, and repositioning aids that are made of durable quality and intended for commercial use. The number of lifts required to ensure the safety of patients and caregivers depends on the level of physical dependency of the patients. As a general rule, one full-body lift should be provided for every 8-10 non-weight-bearing patients/residents, and one stand-up lift should be provided for every 8-10 partial-weight-bearing residents.

Infection control considerations

All patient lifting equipment, slings, and assistive devices should be cleaned and laundered to comply with infection control procedures and policies. If possible, disposable slings should be used on patients who pose an infection control risk. If reusable slings are used, the patients' name should be marked on the sling and the sling should be stored at their bedside. Patient lifting equipment should be cleaned on a regular basis and after each use on a patient who poses an infection control risk.

Full-body lifts are intended for patients who can't bear weight during any patient transferring task. If any caregiver is required to lift more than 35 lbs of a patient's weight or the patient is unpredictable or prone to lose balance, that patient should be considered fully dependent, and assistive devices should be used for the transfer. Full-body lifts can be equipped with a weighing scale.

Full-body lifts:

- should be able to lift patients from bed height as well as pick up a patient from the floor.
- should be stored with slings in a convenient location.
- should have charged batteries when the lift isn't in use.

Stand-assist lifts are intended for patients with partial-weight-bearing ability who require the caregiver to lift no more than 35 lbs of a patient's weight. The patient should require no more help than stand-by, cueing, or coaxing, and the patient should have the mental capacity to follow simple commands when prompted. The stand-assist lift is useful for toileting residents and for bed to chair transfers.

Stand-assist lifts:

- should be stored in a convenient location with slings.

- should have charged batteries when the lift isn't in use.
- Slings that are used with mechanical lifts:
 - should be available in a range of sizes.
 - should be stored in a convenient location that's readily accessible to caregivers.
 - should be washable or disposable.
 - should be laundered on site if possible; laundering off site can result in lost slings; back-up slings should be available for use when slings are being laundered.
- *Repositioning aids* should be available to assist with repositioning patients/residents in bed.
- *Surface friction-reducing devices, slide sheets, and lateral transferring devices*
 - should be made of durable quality.
 - should be capable of adjusting patients/residents in bed, regardless of patient size.

Medical management program

If an employee is injured on the job, employees should report the injury to their supervisor immediately. Every injury should be treated promptly and each incident should be investigated so that preventive measures can be implemented.

Record keeping

Training records shall be maintained by the training coordinator. All injury and illness records and incident investigations should be maintained and periodically examined to evaluate the effectiveness of the safe patient lifting program. Periodic analysis of these data will make it possible to identify and understand persistent injury problems and propose countermeasures.

More information about developing a safe patient handling policy can be found at Patient Care Ergonomics Resource Guide: Safe Patient Handling and Movement, VA Hospital, Tampa, Fla., and Department of Defense, 2001. Revised August 31, 2005. Available at: http://www.visn8.med.va.gov/patientsafetycenter/resguide/ErgoGuide_PtOne.pdf.

Occupational Safety & Health Administration. Guidelines for Nursing Homes: Ergonomics for the Prevention of Musculoskeletal Disorders, OSHA 3182, 2003. Available at: <http://www.osha.gov/ergonomics/guidelines/nursinghome/>.

¹The appropriate term should be used by the healthcare facility, "patient" is used in hospitals, "client" in home care, and the term "resident" should be used in nursing homes.

Center. Available at: <http://www.patientsafetycenter.com/Pt%20Care%20Ergonomics%20Resource%20Guide%20Pt%202.pdf>. Accessed March 12, 2004.

17. Nelson A, Matz M, Chen F, et al. Development and evaluation of a multifaceted ergonomics program to prevent injuries associated with patient handling tasks. *Int J Nurs Stud*. 2006;43(6):717-733.
18. U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). Ergonomics Guidelines for Nursing Homes. 2002. Available at: http://www.osha.gov/ergonomics/guidelines/nursinghome/final_nh_guidelines.html. Accessed June 22, 2003.
19. American Nurses Association. *Position Statement on Elimination of Manual Patient Handling to Prevent Work-Related Musculoskeletal Disorders*. 2003. Available at: <http://nursingworld.org/readroom/position/workplac/pathand.htm>. Accessed March 12, 2004.
20. CDC. The state of the CDC, fiscal year 2003, p. 15. Available at: <http://www.cdc.gov/niosh/state-of-cdc.html>.
21. Collins JW, Wolf L, Bell J, Evanoff B. An evaluation of a "best practices" musculoskeletal injury prevention program in nursing homes. *Injury Prevention*. 2004;10(4):206-211.
22. Tiesman HM, Nelson AL, Charney W, et al. Effectiveness of a ceiling-mounted patient lift system in reducing occupational injuries in long term care. *J Healthcare Safety*. 2003;1(1):34-40.
23. Nelson A, Fragala G, Menzel N, Gross C. Preventing nursing back injuries: Redesigning patient handling tasks. *AAOHN J*. 2003;51(3):126-134.
24. Knibbe JJ, Knibbe NE, Geuze L, Vander-schaaf-Wubs I. *Sector Report Nursing Homes and Homes for the Elderly on Physical Loads and Options for Prevention*. Utrecht, the Netherlands: Sector Funds Care and Welfare; 1999.
25. Tickin M. Financial backing for healthier backs. *Nursing Times*. 1999;95(19):48-50.
26. U.S. Department of Labor, Bureau of Labor Statistics. Standard Occupational Classification System 2002. Available at: <http://www.bls.gov/soc>. Accessed on October 22, 2004.
27. Garg A. *Long-Term Effectiveness of "Zero-Lift Program" in Seven Nursing Homes and One Hospital*, contract no. U60/CCU512089-02. Milwaukee, Wis: University of Wisconsin-Milwaukee; 1999.
28. Yassi A, Cooper JE, Tate RB, et al. A randomized controlled trial to prevent patient lift and transfer injuries among health care workers. *Spine*. 2001;26(16):1739-1746.
29. Elford W, Straker L, Strauss G. Patient handling with and without slings: an analysis of the risk of injury to the lumbar spine. *Applied Ergonomics*. 2000;31(2):185-200.
30. Engkvist I, Hjelm EW, Hagberg M, Menckel E, Ekenvall L. Risk indicators for reported over-exertion back injuries among female nursing personnel. *Epidemiology*. 2000;11(5):519-522.
31. Evanoff B, Wolf L, Aton E, Canos J, Collins J. Reduction of injury rates in nursing personnel through introduction of mechanical lifts in the workplace. *Am J Ind Med*. 2003;44(5):451-457.
32. Smedley J, Trevelyan F, Inskip H, et al. Impact of ergonomic intervention on back pain among nurses. *Scand J Work Environ Health*. 2003;29(2):117-123.
33. Trinkoff AM, Brady B, Nielsen K. Workplace prevention and musculoskeletal injuries in nurses. *J Nurs Admin*. 2003;33(3):153-158.
34. Owen BD, Keene K, Olson S. An ergonomic

approach to reducing back/shoulder stress in nursing personnel: a five year follow up. *Int J Nurs Studies*. 2002;39(3):295-302.

35. Owen BD. Preventing injuries using an ergonomic approach. *AORN J*. 2000;72(6):1031-1036.

ABOUT THE AUTHORS

Audrey L. Nelson is director of the Patient Safety Center of Inquiry at James A. Haley Veterans Affairs Medical Center, Tampa, Fla. **James Collins** is associate director for science, Division of Safety Research, Centers for Disease Control and Prevention/National Institute for Occupational Safety and Health, Morgantown, W.V. **Hanneke Knibbe** is a research associate with LOCOMotion Research and Health Consultancy, Bennekom, the Netherlands. **Ken Cookson** is a manual handling advisor at University Hospital, Aintree, Liverpool, England. **A.B. de Castro** is an assistant professor and director of the Occupational and Environmental Health Nursing department at the University of Washington School of Nursing Seattle, Wa. **Kevan L. Whipple** is a senior staff physical therapist at Veterans Affairs Salt Lake City Health Care System, Salt Lake City, Utah.

The research reported here was supported by the Department of Veterans Affairs, Veterans Health Administration (VHA), Health Services Research & Development and New Program Initiatives. The views expressed in this article are those of the authors and don't necessarily represent the views of the Department of Veterans Affairs.

LOCOMotion is a government-affiliated company in the Netherlands with no commercial interests in the United States.

The authors have disclosed that they have no significant relationship or financial relations with any commercial companies mentioned in this continuing-education activity.

CE CONNECTION

Earn CE credit online:

Go to <http://www.nursingcenter.com/CE/NM> and receive a certificate within minutes.

INSTRUCTIONS

Safer patient handling

TEST INSTRUCTIONS

- To take the test online, go to our secure Web site at <http://www.nursingcenter.com/ce/nm>.
- On the print form, record your answers in the test answer section of the CE enrollment form on page 33. Each question has only one correct answer. You may make copies of these forms.
- Complete the registration information and course evaluation. Mail the completed form and registration fee of \$19.95 to: **Lippincott Williams & Wilkins, CE Group**, 2710 Yorktowne Blvd., Brick, NJ 08723. We will mail your certificate in 4 to 6 weeks. For faster service, include a fax number and we will fax your certificate within 2 business days of receiving your enrollment form.
- You will receive your CE certificate of earned contact hours and an answer key to review your results. There is no minimum passing grade.
- Registration deadline is March 31, 2009.

DISCOUNTS and CUSTOMER SERVICE

- Send two or more tests in any nursing journal published by LWW together

and deduct \$0.95 from the price of each test.

- We also offer CE accounts for hospitals and other health care facilities on [nursingcenter.com](http://www.nursingcenter.com). Call **1-800-787-8985** for details.

Provider Accreditation

Lippincott Williams & Wilkins, publisher of *Nursing Management*, will award 2.0 contact hours for this continuing nursing education activity.

LWW is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

LWW is also an approved provider of continuing nursing education by the American Association of Critical-Care Nurses #00012278 (CERP Category O), District of Columbia, Florida #FBN2454, and Iowa #75. Lippincott Williams & Wilkins home study activities are classified for Texas nursing continuing education requirements as Type 1. This activity is also provider approved by the California Board of Registered Nursing, Provider Number CEP 11749, for 2.0 contact hours. Your certificate is valid in all states.

Safer patient handling

GENERAL PURPOSE: To acquaint the registered professional nurse with the current status of patient handling policies.

LEARNING OBJECTIVES: After reading this article and taking this test, you'll be able to: 1. Describe the current status of patient handling policies. 2. Explain the benefits of introducing revised patient handling policies.

1. Between 1989 and 2001, the number of U.S. lost-workday injury cases per 100 full-time nurses has
a. increased significantly.
b. experienced minimal change.
c. decreased significantly.
d. never been the subject of research.

2. In other countries, nursing musculoskeletal injuries have
a. increased significantly.
b. experienced minimal change.
c. declined significantly.
d. never been the subject of research.

3. Each of the following statements related to patient handling statistics is true *except*:
a. In a typical 8-hour shift, a nurse lifts, cumulatively, 3,600 pounds.
b. 52% to 63% of nurses report musculoskeletal pain that lasts for more than 14 days.
c. Pain lasts more than a year for 67% of nurses with musculoskeletal pain.
d. In 2004, there were 3.3 lost workdays per 100 full-time nurses in the United States.

4. At the present time, safe patient handling policies
a. are undergoing an evolutionary process.
b. have finally achieved universal clarity and acceptance.
c. should emphasize only facility-based requirements.
d. are found only in the United States and Britain.

5. One key point within the safe patient handling policies adopted by the United Kingdom is that
a. healthcare providers will never transfer a patient manually.
b. patients should be discouraged from assisting in their transfers.
c. a patient's physical and cognitive status can't be the basis for patient handling policies.
d. proper infrastructure must be in place before enforcing safe patient handling policies.

6. A judge in the United Kingdom ruled that a blanket proscription against all manual handling was
a. likely to be unlawful.
b. legal, but not helpful in safeguarding healthcare workers from injury.
c. outside the jurisdiction of the law.
d. the best safeguard against healthcare worker injuries.

7. Which statement regarding implementing safe patient handling is true?
a. The United States is an international leader in implementing safe patient handling policies.
b. The United Kingdom was the first to propose a lift-free hospital.
c. Several European countries imposed a maximum patient weight of 85 pounds to be lifted by a nurse.
d. The United States imposed a maximum patient weight of 54 pounds to be lifted by a nurse.

8. Which statement regarding implementation of facility-based safe patient policies is true?
a. Implementing safe patient handling policies isn't feasible in the United States.
b. Few facilities have implemented safe patient handling policies.
c. Implementing safe patient handling policies has reduced injuries to caregivers.
d. The effectiveness of safe patient handling policies has yet to be documented.

9. Prior to implementing a safe patient handling policy, the facility should have in place
a. a sufficient number of catalogues from which to choose equipment.
b. a sufficient number of staff ready to be trained in lifting techniques.
c. an administrative and supervisory staff who support safe patient handling.
d. a plan to identify high-risk units.

10. The safe patient handling policy communicates in writing the
a. responsibilities of all medical and administrative staff related to the safe handling of patients.
b. specific punitive consequences of the staff's failure to implement the policy.
c. legal liability of evaluating the transfer needs of patients.
d. patients' personal responsibility during emergency evacuations.

11. The initial capital investment for implementing safe patient handling policies
a. is considered unrecoverable.
b. can be recovered in 2 to 3 years.
c. requires all needed equipment to be purchased at the same time.

d. avoids the need for developing infrastructure.
12. The use of good body mechanics by healthcare workers
a. has scientific evidence supporting its effectiveness against back injuries.
b. is effective only when combined with intensive training programs.
c. has no scientific evidence to support its effectiveness.
d. has eliminated almost all back injuries in nurses.

13. The "bent knee, straight back" method of lifting
a. applies to bedridden patients only.
b. applies to wheelchair patients only.
c. prevents back injuries when lifting any patient.
d. doesn't apply to lifting patients.

14. Factors contributing to the difficulty of lifting patients include all the following *except*
a. physical strength of female nurses.
b. patient placement.
c. patient resistance.
d. adjustable bed heights.

15. A common element of successful safe patient handling programs includes
a. sufficient mechanical equipment to assist with lifting tasks.
b. staff self-trained in the use of available equipment.
c. an unwritten but general understanding of the best way to move patients.
d. effective punitive measures for failure to comply with safe patient handling policies.

16. Each statement regarding the benefits of safe patient handling policies is true *except*:
a. Such policies result in less musculoskeletal injuries.
b. There's a reduction in lost workdays due to injury.
c. Fewer staff need to be scheduled per shift.
d. Nursing careers are less likely to be cut short by injury.

17. The financial savings from fewer injured employees and reduced liability expenses are called
a. initial cost savings.
b. indirect cost savings.
c. capital savings.
d. direct outlay savings.

ENROLLMENT FORM: Nursing Management, March 2007, Safer patient handling

A. Registration Information:

Last name _____ First name _____ MI _____
Address _____
City _____ State _____ ZIP _____
Telephone _____ Fax _____ E-mail _____

LPN RN CNS NP CRNA CNM other _____
Job title _____ Specialty _____
Type of facility _____ Are you certified? Yes No
Certified by _____
State of license (1) _____ License # _____
State of license (2) _____ License # _____
 From time to time, we make our mailing list available to outside organizations to announce special offers. Please check here if you do not wish us to release your name and address.
 Please fax my certificate to me.

Registration Deadline: March 31, 2009

Contact hours: 2.0 Pharmacology hours: 0.0 Fee: \$19.95

B. Test Answers: Darken one circle for your answer to each question.

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d
1. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8. <input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>												

C. Course Evaluation*

1. Did this CE activity's learning objectives relate to its general purpose? Yes No
2. Was the journal home study format an effective way to present the material? Yes No
3. Was the content relevant to your nursing practice? Yes No
4. How long did it take you to complete this CE activity? _____ hours _____ minutes
5. Suggestion for future topics _____

D. Two Easy Ways to Pay:

Check or money order enclosed (Payable to Lippincott Williams & Wilkins)
 Charge my Mastercard Visa American Express
Card # _____ Exp. date _____
Signature _____

Nursing Management[®]

www.nursingmanagement.com

March 2007

The Journal of Excellence in Nursing Leadership

CE

Safe patient handling

26

Leveling horizontal violence 34

*An emerging giant:
Nursing informatics 38*

Get the executive edge 43

Part 1 of 2



Wolters Kluwer
Health

Lippincott
Williams & Wilkins