



CONNECTICUT OCCUPATIONAL HEALTH e-NEWS



Volume 3, Issue 4

Fall 2006

The Connecticut Occupational Health e-News is published quarterly by the Connecticut Department of Public Health to provide occupational health surveillance and educational information to workers, employers, clinicians, and other community partners interested in the protection and promotion of healthy work environments.

CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

SPECIAL ISSUE FOR NURSES AND NURSING HOME WORKERS

Keeping Connecticut Healthy

Connecticut Occupational Health e-News (COHEN) is produced by the Occupational Health Unit

State of Connecticut
Department of Public Health,
Environmental Health Section

Environmental & Occupational Health Assessment Program
410 Capitol Avenue
MS#11EOH
PO Box 340308
Hartford, CT 06134-0308

Phone: (860)509-7744
Fax: (860)509-7785

Occupational Health Unit Staff

Thomas St. Louis, MSPH
Unit Supervisor

Deborah Pease, MPH, CHES
Epidemiologist

Ratan Singh, PhD, MPH
Epidemiologist

Albert DeLoreto, BS
Epidemiologist



CONNECTICUT WORKER TIME CAPSULE

Nurses treating men with hand injuries at a plant infirmary.

Man in the background appears to have an eye injury.

Probably New Departure Co. in Bristol, CT. September 1941.

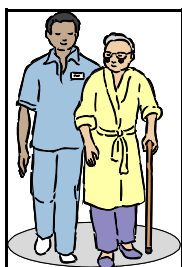
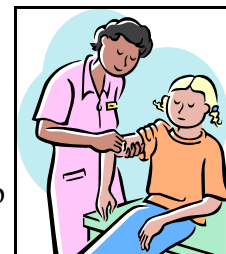
From the NIOSH collection of historic photographs. Photograph by John Collier, Jr., Farm Security Administration Photographer, on assignment for the US Public Health Service and the Connecticut Department of Health.

THE STRESS OF NURSING SHORTAGES



Nurses are an essential and often under-appreciated part of the healthcare system. Recent nursing shortages have had a negative impact on the nursing community and the overall healthcare system. It is predicted that the demand for nurses will continue to exceed the supply as the population and the nursing workforce ages, and the demand for nurses will continue to be a serious problem. In Connecticut, the average age of nurses is 45 years and the number of nurses taking the registration exams has decreased by 23 percent between 1994 and 1999. Nationally, the number of nurses working who were under 30 years declined by 41 percent from 1983 to 1998. These shifts in the demographics of the nursing care industry will continue to have an impact on the healthcare industry in Connecticut and nationwide.

The healthcare industry has been forced to re-engineer its organizational structure to compensate for nursing shortages and reduce healthcare costs. As a result, many organizations have replaced nursing positions with nursing aide positions to lower their costs. Nursing Aides or Nursing Assistants are generally hired to perform routine tasks such as answering patients' call lights, deliver messages; serve meals; make beds; and help patients to eat, dress, and bathe. However because of the shortage of available nurses, nursing aides are increasingly being asked to perform more complex tasks, such as providing skin care to patients; checking vital signs such as temperature, pulse rate, respiration rate, and blood pressure; providing help getting into and out of bed; and observing and assessing patients' physical, mental and emotional conditions.



Nursing aides employed in nursing care facilities often are the principal caregivers, having far more contact with residents than do other members of the staff. Because some residents may stay in a nursing care facility for months or even years, aides develop ongoing relationships with patients and need to interact with them in a positive, caring way. Unfortunately, workplace pressures and stress among medical staff can have a negative effect on both worker and patient.

The National Institute for Occupational Safety and Health (NIOSH), part of the U.S. Department of Health and Human Services, states that job stress, now more than ever, poses a threat to the health of workers and the health of organizations. Job stress is defined by NIOSH as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Stress can also occur when the situation has high demands and the worker has little or no control over it, resulting in poor worker health and potential injury.

Symptoms & Warning Signs of Job Stress

- Apathy
- Depression
- Low morale
- Boredom
- Anxiety
- Frustration
- Negativism/cynicism
- Fatigue
- Alienation
- Anger/irritability
- Physical problems (head/stomach problems)
- Excessive absenteeism



What Causes Job Stress?

Both individual and organizational causes contribute to overall job stress. Individual characteristics such as personality and coping style are often the best predictor of how a person will handle stress on the job. However, organizations with certain working conditions can also inherently cause stress-inducing situations such as fear of job loss, excessive workload demands, lack of control or clear direction, poor or dangerous physical working conditions, inflexible work hours, and conflicting job expectations.

Ideally, individuals experiencing job stress would focus on eliminating or reducing job stress both at the individual and organizational levels, however, preventing job stress at the organizational level is more challenging because it needs to be supported by the organization.



Five Things a Worker Can Do To Prevent Job Stress

1. Put it in perspective. Jobs are disposable. Your friends, families and health are not. If your employer expects too much of you, and it's starting to take its toll on you, start looking for a new job or new employer.
2. Get time away. If you feel the stress building, take a break. Walk away from the situation, perhaps walking around the block, sitting on a park bench, taking in a little meditative time. Exercise does wonders for the psyche. But even just finding a quiet place to sit and listen to music can reduce stress.
3. Talk it out. Sometimes the best stress-reducer is simply sharing your stress with someone close to you. The act of talking it out and getting support and empathy from someone else is often an excellent way of blowing off steam and reducing stress. Have a support system of trusted people.
4. Have realistic expectations. While Americans are working longer hours, we can still only fit so much work into one day. Having unrealistic expectations for what you can accomplish sets you up for failure and increased stress.
5. Maintain a positive attitude (and avoid those without one). Negativism takes the energy and motivation out of any situation, so avoid it whenever possible. Instead, develop a positive attitude and learn to reward yourself for little accomplishments (even if no one else does).

For more information on nursing shortages and reducing workplace stress, please refer to the following resources:

[The AGS Foundation for Health in Aging – Nursing Home Care](#)

[American Association of Colleges of Nursing – Nursing Shortages](#)

[Nursing Workforce – Nursing Shortages: A Growing Concern](#)

[American Institute of Stress – Job Stress](#)

[International Labour Organization – Safe Work: Work-related Stress in Nursing](#)

[Occupational and Environmental Medicine - The Effectiveness of Current Approaches to Workplace Stress](#)

[Management in the Nursing Profession: an Evidence Based Literature Review](#)

[Cool Nurse – Stress Management: What is Stress Anyway?](#)

Information abstracted in part from QuintCareers.com, Connecticut Nursing News, U.S. Department of Labor Bureau of Labor Statistics and the other resources listed above.

PATIENT HANDLING ERGONOMICS: GUIDELINES FOR NURSING CARE FACILITIES

ERGONOMICS is the science of fitting the job to the worker. When there is a mismatch between the physical requirements of the job and the physical capacity of the worker, work-related musculoskeletal disorders (MSDs) can result. The American Hospital Association has stated that work-related MSDs account for the largest proportion of Workers' Compensation costs in hospitals and long-term nursing home facilities nationwide.¹ According to the US Department of Labor, employees in nursing and personal care facilities suffer over 200,000 work-related injuries and illnesses a year. Workers in nursing homes are two-times as likely as other workers to be injured on the job.² The American Nurses Association reports that ergonomic injuries occur in nurses at a rate that is twice that found in the general working population, and that up to 38% of the current nursing workforce has been affected by a back injury.³

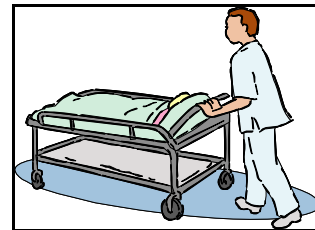


Patient handling tasks pose increased ergonomic risks if they are:

- Repetitive (e.g., repeatedly cranking manual adjustments for beds),
- Done in awkward postures (e.g., reaching across beds to lift patients/residents),
- Done using a great deal of force (e.g., pushing chairs or gurneys up ramps),
- Lifting heavy objects (e.g., manually lifting immobile patients alone)

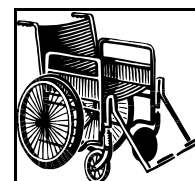
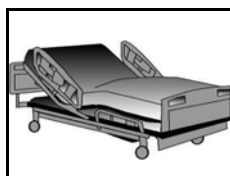
Other Hazards

- Multiple lifts per shift (more than 20)
- Lifting alone, no other staff available to help
- Lifting un-cooperative or confused patients
- Lifting patients that cannot support their own weight
- Lifting or repositioning obese patients
- Trying to stop patients from falling or picking patients up from the floor or bed
- Expecting employees to perform work beyond their physical capabilities
- Distance to be moved, and the distance the patient is from the employee, (it is more stressful to reach away from the body to lift or pull a patient)
- Awkward postures required by the activity
- Ineffective training of employees in body mechanics and proper lifting techniques



Possible Solutions

Good work practices include continually identifying hazardous lifting tasks and implementing engineering and work practice controls to help reduce or prevent injuries in workers performing those tasks. Providing employees with proper lift-assist devices and equipment can greatly reduce the likelihood of worker injuries. Proper equipment selection depends on the specific needs of the facility, patients, staff, and management.



Examples of lift and movement-assist devices that are commonly used in hospitals and long-term care facilities include:

Shower chairs that fit over the toilet can eliminate multiple transfers, saving health care workers multiple lifts. A patient can be moved to the shower chair, toileted, showered, and transferred back to the wheelchair.

Shower stalls that allow for shower chairs to be pushed in and out on level floor surfaces. These include standard showers without the front lip to allow for easy access as well as bath cabinets and adjustable tubs.

Toilet seat risers equalize the height of wheelchair and toilet seat eliminating the need to lift the patient.

Mechanical lift equipment to help lift patients who cannot support their own weight. Choose a lift that does not require manual pumping to avoid possible MSDs.

Overhead track mounted patient lifters are track systems built into the ceiling that sling lifts attach to. This system provides patients mobility from room to room without manual lifting.

Height adjustable electric beds allow for easy transfers from bed height to wheelchair height. Avoid hand-cranked beds, which can lead to wrist/shoulder MSDs.

Trapeze lifts are a bar device suspended above the bed which allows patients with upper muscle strength to help reposition themselves.

Walking belts or gait belts (with handles) that provide stabilization for ambulatory patients by allowing workers to hold on to the belt and support patients when walking.

Wheelchairs with removable arms allow for easier lateral transfers.

Sitting-standing wheelchairs that provide sitting-to-standing and standing-to-sitting options.

Roll on weight scales allow patients who cannot stand to be weighed in their wheelchairs.

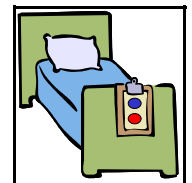
Pivot transfer disk devices can be used for standing pivot transfers and seated pivot transfers for patients that have weight bearing capacity and are cooperative.

Patient Care Plans

Healthcare workers and patients can benefit from a written care plan for each patient that describes specific patient needs, degree of assistance required, and any special treatments.

This may include any or all of the following:

- **Color-coding** of patient lift requirements for posting at bedside. By simply looking at a displayed color-coding system, an employee can know the mobility-level of the patient and what kind of assistance the patient will need with moving or transfers.
- **Segregation** of patients based on lift-assist requirements so equipment and trained staff is appropriately assigned and located.
- **Staggered staffing** to provide appropriate staff coverage to assist with patient movement during break periods.



Potential Cost Savings

Nursing homes that have implemented injury prevention efforts focusing on resident lifting and repositioning methods have achieved considerable success in reducing work-related injuries and associated Workers' Compensation costs. After implementing some of the policies that have been mentioned above, the Wyandot County Nursing Home in Upper Sandusky, Ohio has reported that no back injuries resulting from resident lifting have occurred in over five years, Workers' Compensation costs have declined from an average of \$140,000 per year to less than \$4,000 per year, reduced absenteeism and overtime have resulted in annual savings of about \$55,000, and reductions in costs associated with staff turnover has saved an additional \$125,000.⁴

Information abstracted in part from "Health-Care Wide Hazards Module-Ergonomics", Occupational Safety & Health Administration (OSHA), Hospital eTool, U.S. Department of Labor, as well as *Meinhardt, Patricia L. "Ergonomics in healthcare", Center for Occupational and Environmental Medicine, Arnot Ogden Medical Center, Elmira, NY. 2003 (1-3)* and *Documents submitted to OSHA by Wyandot County Nursing Home (4)*.

Additional Sources of Information:

A Back Injury Prevention Guide for Health Care Providers, Cal/OSHA Consultation Program (800) 963-9424

Patient Care Ergonomics Resource Guide: Safe Patient Handling and Movement, Patient Safety Center of Inquiry, Veterans Health Administration and Department of Defense (813) 558-3902



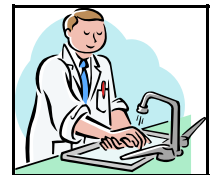
Beat the Flu



The time of the year is fast approaching when influenza will begin to make people sick around Connecticut. According to the CDC, every year in the United States 5-20% of the population gets the flu. In nursing homes, people live in close proximity to one another and are especially susceptible to these winter infections, due to underlying medical conditions and advancing age. The following tips can help protect nursing home workers and residents from becoming ill from colds and the flu this winter.

Practice Good Hygiene

The influenza virus spreads very easily from person to person through fluid droplets produced during coughing and sneezing. The flu can also be caught by touching your face and nose after touching door handles, tables and other objects that someone who is ill has infected. It is important to make good hygiene practices part of your normal routine, especially when working in nursing homes during cold and flu season.



- Wash hands frequently with soap and water, especially in-between caring for different patients.
- Spray and wipe contaminated surfaces with a disinfectant approved to kill the influenza virus.
- Avoid touching your face (eyes, nose, and mouth) frequently during working hours, especially when involved in direct patient care.
- Cover your mouth when you cough or sneeze to prevent influenza from becoming airborne. Re-wash your hands after coughing or sneezing to avoid infecting others.

Get Your Flu Shot

Vaccination against influenza is perhaps the best way to assure you don't catch the flu this winter. According to the American Lung Association, October 15th to November 15th is the best time to receive the flu shot, since peak immunity is achieved at one to two months from vaccination. Most employers in the health care sector offer flu shots to their employees free of charge, however you can also obtain a flu shot for relatively low cost from your private physician or a flu shot clinic.

Remember, the composition of the flu shot is different every year to match the prominent strains of the virus circulating in the population for that particular year.

Therefore, it is very important to **get a flu shot every year** to protect yourself and those around you.

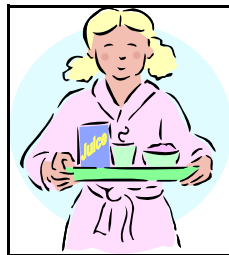
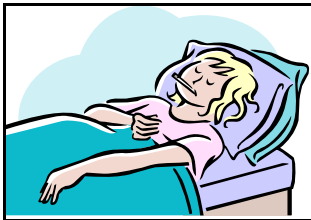


Stay at Home If You Are Sick

Symptoms of influenza include cough, fever, chills, weakness, loss of appetite, headache, body aches and sore throat.

If you begin to experience these symptoms, it is **very important that you stay out of work** to avoid spreading the illness to vulnerable residents and your co-workers.

- Stay at home and get plenty of bed rest.
- Drink plenty of fluids to avoid dehydration.
- Call your doctor at the onset of symptoms to discuss which cold and flu medications and/or anti-virals are appropriate to treat your symptoms.



With the cold and flu season fast approaching, following these health tips can help you to beat the flu this winter. In addition to the information above, the following resources can provide you with more flu facts and tips for infection control.

Centers for Disease Control and Prevention

<http://www.cdc.gov/flu/>

The American Lung Association

<http://www.lungusa.org>

Information abstracted in part from The Centers for Disease Control and Prevention, and the American Lung Association.



Federal Resources on the Web

OSHA Nursing Home eTool

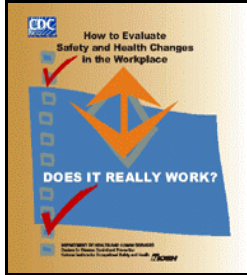


The OSHA Nursing Home eTool is a web-based compliance assistance tool designed to provide nursing home owners, administrators, and staff with guidance information for developing a comprehensive health and safety program. The worker illness and injury rate in the nursing home industry is more than double the overall rate in the US. The Nursing Home eTool provides information on a wide variety of health and safety topics applicable to the nursing home environment, such as ergonomics, blood borne pathogen exposure, pharmaceutical handling, and workplace violence, among others.

This tool not only provides information on proper compliance with OSHA's regulatory standards for the nursing home industry, but also provides guidance not included within specific mandates, such as examples of good industry practice. This additional information is useful in helping to develop programs that go above and beyond what is required by law to protect worker health and safety. The OSHA Nursing Home eTool can be accessed on the web at <http://www.osha.gov/SLTC/etools/nursinghome/index.html>.

NIOSH Provides Guidance on Lifting Programs in Nursing Homes

NIOSH Case Study: Preventing Back Injuries in Nursing Homes



This case study is taken from a series of similar studies contained in NIOSH Publication Number 2004-135, *Does It Really Work?: How to Evaluate Safety and Health Changes in the Workplace*. It details a survey that was conducted to identify problematic lifting activities performed by nurses in five different nursing homes owned by a single company, and the subsequent intervention activities that took place. Nurses working in these nursing homes identified three tasks as "very heavy" lifting activities, including transferring residents on and off the toilet, transferring residents in and out of chairs and beds, and bathing and weighing residents. These activities led to the vast majority of injuries leading to workers' compensation claims in these nursing homes. Lifting equipment was purchased for all five of the nursing homes and injuries were reduced by half. The resulting savings in Workers' Compensation claims far outweighed the cost of the lifting equipment. The document can be found on the NIOSH website at <http://www.cdc.gov/niosh/docs/2004-135/casestudies/nursingHomes.html>.

Safe Lifting and Movement of Nursing Home Residents

NIOSH Publication Number 2006-117 is a guide for nursing home operators, managers, and workers who are interested in learning more about how to institute a safe lifting program for residents in nursing homes. This guide is the product of research conducted by NIOSH, the Veterans' Health Administration (VHA) and the University of Wisconsin-Milwaukee, and shows that safe lifting programs in nursing homes that include mechanical lift devices can result in significant cost savings, can protect nurses and other workers responsible for patient lifting, and can increase the quality of patient care. The guide also presents a business case scenario that shows how the resources invested in a safe lifting program can be recovered several times over by reducing Workers' Compensation costs and by lowering the number of lost or restricted workdays for staff. The entire guide can be downloaded from the NIOSH website at <http://www.cdc.gov/niosh/docs/2006-117/>.

