Reducing hazards in long-term care facilities

The long-term care industry is one of America’s fastest growing industries. Employment in this industry grew nearly 50 percent from 1982 to 1992.

Currently, long-term care and personal care facilities employ approximately 1.6 million workers. The industry is expected to grow to 2.4 million workers by the year 2005. Resident-handling employees represent 40 percent of total long-term care employment, but account for almost 70 percent of the injuries that result in days away from work.

Traditionally, the industry’s focus on safety has been aimed at residents, but in the past several years the public is more aware of occupational hazards in the workplace.

This heightened awareness provides an opportune time for developing a comprehensive occupational safety and health program designed to promote recognition, evaluation and control of hazards found in long-term care facilities.

The following table shows the rise in long-term care facility incidents compared to all other industries and underscores the need for such a program.

<table>
<thead>
<tr>
<th></th>
<th>Long-term care facilities</th>
<th>All other industries</th>
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</thead>
<tbody>
<tr>
<td>Total occupational injury and illness cases per 100 full-time workers</td>
<td>19.1</td>
<td>8.4</td>
</tr>
<tr>
<td>Incidence rate of lost workdays per 100 full-time workers</td>
<td>12.4</td>
<td>3.5</td>
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Purpose

This document provides a framework to incorporate resident-handling guidelines into existing safety and health programs. These guidelines will assist in reducing the number and severity of occupational injuries and illnesses specific to long-term care facilities.

The following components are covered:
- management leadership and employee participation
- workplace analysis
- accident and record analysis
- hazard prevention and control
- medical management
- safety and health training.

This booklet is intended to help you get started with the planning process. It is not the only means of achieving a safe and healthy workplace. An employer who wishes to further enhance their program may take additional measures to reduce staff injuries and illnesses.

“A Workplace Accident and Injury Reduction” (AWAIR) Act, MN Statutes §182.653 subd. 8, requires employers to establish effective safety and health programs. These guidelines can be tailored to your specific workplace and are an important part of AWAIR compliance.

Essential elements of safety and health programs

Commitment and involvement are essential elements in a complete safety and health program. Management commitment provides organizational resources and the motivational force necessary to effectively control resident-handling hazards.

Make injury reduction a priority. Develop clear goals for a safety and health program and an action plan to meet those goals.

Commit the resources to insure adequate staffing, training and engineering controls.

Assign and communicate responsibilities for the program to all managers, supervisors and employees. Develop accountability mechanisms which include written assignment of responsibility to specific personnel.

Maintain an effective written program and communicate it to all employees. The program should include policies and procedures in the following areas:
- Orientation of employees;
- New and continuing injury prevention education;
- Techniques for transferring and lifting;
- Modified work programs (post-injury and return-to-work);
- Enforcement of transfer and lift procedures;
- Reporting procedures for early signs and symptoms of back pain and other musculoskeletal injuries.

Employee involvement provides the necessary tools to assist management in program development and implementation. The steps outlined below can assist management in structuring their leadership and outlining an employee participation plan.

The written program should be reviewed and updated annually and whenever necessary to reflect new or modified tasks and procedures which change worker exposure to ergonomic hazards.

Evaluate effectiveness of the program regularly and monitor success in meeting goals and objectives. Review recorded OSHA 200 injuries, workers’ compensation and insurance reports, and reports from employees of unsafe working conditions. Conduct walkaround inspections and employee surveys regarding worksite changes (frequency depends on each facility’s needs).

Reduce musculoskeletal injuries by establishing, communicating and enforcing a disciplinary system applying equally to all workers who break or disregard safety rules, safe work practices and procedures.

Encourage employee involvement through a complaint/suggestion process, prompt response to and accurate investigation of injuries, establishment of safety and health committees, and training in the skills necessary to analyze jobs for ergonomic stressors.
Workplace analysis identifies hazards

The objective of workplace analysis is to recognize, identify and correct resident-handling hazards. Identify existing and potential hazards by reviewing current publications describing long-term care facility hazards, hazard categories, workplace surveys, and analysis of trends.

This analysis should identify conditions and work habits which create hazards and the areas where hazards may develop.

The following tasks will assist with a workplace analysis:

- **Gather relevant information** on ergonomic solutions to resident-handling problems;
- **Conduct baseline employee screening surveys** using a checklist to evaluate ergonomic risk factors and to determine which tasks are most stressful and need modification;
- **Perform job analyses** with persons skilled in evaluating ergonomic risk factors associated with resident handling; (Note: Evaluations should be conducted during peak lifting and transferring times.)
- **Modify** the most stressful resident transfers;
- **Evaluate the effectiveness** of changes by conducting periodic surveys and follow-ups;
- **Review circumstances** of each resident-handling injury to determine if a task can be modified to reduce future risk.

Injury and illness record analysis

An effective safety and health program includes an analysis of injury and illness records. By analyzing injury and illness trends over time, patterns will indicate common injuries and may suggest methods of prevention.

Analysis can point to sources and locations of hazards and will highlight tasks that result in a high number of injuries. In addition, all accidents and near-miss incidents should be investigated so causes can be identified and prevented in the future.

- **Investigate all** accidents, incidents and near-misses with a knowledgeable team.
- **Establish a documented procedure** that encourages employees to promptly and accurately report hazards, unsafe work practices and occupational injuries and illnesses without fear of reprisal.
- **Respond and followup quickly** to employees’ suggestions or concerns.
- **Review** OSHA 200 logs, OSHA 101 forms, workers’ compensation records, insurance records, and resident injury reports regularly for trends or patterns.
- **Respond and act** on all recommendations resulting from an incident investigation. Develop a tracking system to insure hazard correction.
Methods of hazard prevention and control

Resident-handling injuries are prevented primarily by proper selection of equipment, effective use of assisting devices and implementation of proper work practices. The equipment must be available in sufficient quantities, convenient for use and properly maintained. Employees must be trained on the proper use of equipment and work practices to reduce the likelihood of injuries.

Engineering controls, administrative controls and work practices can be used to reduce injuries/illnesses. Suggested controls in each category are outlined below.

Preventing hazards with engineering controls

**EQUIPMENT**

- Resident chairs should allow employees to place their feet under chairs and the chair back should be low enough to permit lifting access.

- Mobile chairs, wheelchairs and commodes need functional brakes, mobile arms and footrests which do not obstruct movement.

- Hoists shall be selected by the employees’ and residents’ evaluations for ease of use, comfort and safety. Hoists need to be routinely maintained, conveniently located and available with lifting attachments.

  An adequate number of hoists should be available for the transfer of residents who are dependent or can only provide minimal assistance in the transfer.

- Check for good bed design by looking for convenient location of controls, adjustable bed height, removable or adjustable bed rails, and sufficient foot clearance.

**HOIST CHECKLIST**

- Is a portable resident hoist with maximum capacity available for extremely heavy residents?

- Is one hoist with an adequate number of slings accessible to all employees?

- Does at least one portable hoist have the capacity to lift a resident from the floor?

- Is a backup hoist available quickly?

- Is there a means for weighing dependent residents without a transfer?

**TRANSFERS**

- Resident and transfer surfaces should be at the same approximate level when possible. For example, toilet seats should be raised so the wheelchair seat and toilet seat are the same height. Bath stretchers should be height-adjustable to allow horizontal transfers. During uneven transfers, proper lifting techniques shall be used by employees.

- Use “sliding boards” to ease wheelchair-to-bed and bed-to-wheelchair transfers for residents who can assist.

- Use transfer or walking belts where appropriate; have an adequate number of belts available.

**TRAINING**

- Develop guidelines and train employees on the importance of using resident-handling devices and the techniques for using them. Supervisors and employees should be included in this training.
Supervisors should be familiar with resident-handling guidelines and should enforce company rules.

Care plans should be specific when assessing resident-handling requirements, communicated to affected employees prior to resident handling, and continually updated with any changes.

Select resident clothing which aids transfers, such as non-slippery items, clothing handles for unconscious residents, adaptive clothing for ease of changing and absorbent pads for incontinent residents.

Use proper techniques for resident transfers (resident is properly positioned prior to transfer and resident handling slings or transfer belts are used when appropriate).

Provide assistance to employees when needed for handling residents.

Avoid slips and trips by installing non-slip surfaces in toilet/shower areas and enforcing a policy of immediately cleaning up spills.

Ease workloads by using large wheels on transport equipment and carts.

Proactive medical management: Your key to success

Proper medical management is necessary to reduce the risk of resident-handling injuries through early identification and treatment and to prevent future problems through rehabilitation and training. Health care providers should be part of the injury prevention team.

Providers should conduct on-site reviews and must regularly interact and exchange information with management. Procedures should be established to keep an active relationship with injured/ill employees and medical providers.

The program shall be supervised and evaluated by a person trained in the prevention of musculoskeletal disorders. The following elements should be included in a medical management program:

- Accurate injury and illness recording;
- Early hazard or injury recognition and reporting by employees;
- Conservative treatment with specific transferring restrictions during recovery;
- Systematic monitoring of restricted employees’ return to work (only after transferring skills have been re-assessed);
- The injury prevention team should develop modified temporary tasks, assist management in assigning modified or restricted-duty jobs, and administer a return-to-work program.

Implement and maintain an effective maintenance program for the facility and equipment to minimize resident-handling hazards.

A maintenance program should include:

- Preventative maintenance for resident-handling equipment;
- Timely maintenance of broken equipment;
- A housekeeping program which minimizes slippery work surfaces and slip/fall hazards.

The program shall be supervised and evaluated by a person trained in the prevention of musculoskeletal disorders. The following elements should be included in a medical management program:

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- Conservative treatment with specific transferring restrictions during recovery;
- Systematic monitoring of restricted employees’ return to work (only after transferring skills have been re-assessed);
- The injury prevention team should develop modified temporary tasks, assist management in assigning modified or restricted-duty jobs, and administer a return-to-work program.
Training is an essential part of any safety and health program. The purpose of training and education is to insure that managers, supervisors and employees are sufficiently informed about possible hazards related to their specific work environment.

Programs should be designed and implemented by knowledgeable individuals or teams. Outside experts may be used as long as company practices and procedures are considered and training is tailored to address company-specific needs.

Present information at a level appropriate to the audience and include an opportunity for questions and answers. The level of complexity and amount of training provided should be based on the specific jobs and tasks required of each employee.

Include the use of resident-handling devices in training programs and require employee-demonstrated competency in resident-handling techniques. Training on the early identification, reporting, and conservative treatment of musculoskeletal disorders should also be covered on an annual basis.

Compare injury and illness rates before and after training. Pre and post-tests may be used as a tool for evaluating training programs. Annual refresher training should be provided that addresses specific needs, with provisions made to train absent employees.

All training should be documented including the date given, the names of all trainers, topics covered and attendees.

### Ergonomics Awareness Training

- An overview of the potential risk factors for back and musculoskeletal disorders and general methods of control;
- Signs and symptoms associated with musculoskeletal disorders and a description of the company’s medical treatment program;
- The company’s means of control for risk factors and areas of employee responsibility in the program;
- Staff roles in reporting risk factors, back injuries and musculoskeletal disorders and the appropriate personnel to receive reports.

### New Employee Orientation

Include a job site review of transferring techniques performed by a person skilled in resident transfers and basic training in resident handling in all new employee training, in addition to the topics listed below:

- Never transfer residents when off balance;
- Avoid heavy work with a rotated spine;
- Lift loads close to the body;
- If a resident cannot assist, do not attempt to lift or move them alone. Get assistance;
- Never risk overexertion with a resident that is resistant; request assistance;
- Use mechanical devices according to resident care plans. Residents over 150 pounds are always considered “heavy”;
- Properly place and adjust resident-handling equipment;
- Always bring residents toward you, never away;
- Don’t lift fallen residents alone. Consider mechanical assistance or another mechanism such as the scoop stretcher. When a resident is falling and you are not able to intervene in the initial stage of the fall, for resident and employee safety, guide them down.

### Task-Oriented Employee Training

- Assisting walking residents (stand on weaker side close to resident and take load on hip rather than back);
- Transfer and lift techniques in confined spaces, such as shower stalls and toilet areas.

see Training, page 8
APPENDIX A
Occupational Hazards in Long-Term Care Facilities

**Corridors**
- Loose electrical outlets-switches
- Loose safety rails
- Blocked or locked egress routes
- Slips/trips

**Environmental Services**
- Biological/infectious wastes
- Cleaners/solvents
- Disinfectants
- Electrical
- Ergonomics
- Hazardous wastes
- Latex allergy
- Sharps
- Soaps/detergents
- Wet surfaces

**Food Service**
- Ammonia/chlorine
- Cleaning agents
- Cold/heat stress
- Disinfectants
- Electrical
- Ergonomics
- Egress
- Food processor guarding
- Housekeeping/sanitation
- Pesticides
- Sharps
- Soaps/detergents
- Steam
- Thermal burns
- Wet floors/surfaces

**Laboratory**
- Biological/infectious wastes
- Latex allergy
- Sharps
- Toxic chemicals
- Ventilation/hoods

**Laundry**
- Biological/infectious wastes
- Bleach
- Detergents
- Egress
- Electrical
- Ergonomics--lifting
- Hazardous wastes
- Heat stress
- Latex allergy
- Noise
- Sharps
- Unguarded belts and pulleys
- Unguarded fans
- Wet floors

**Maintenance and Engineering**
- Boiler maintenance
- Cold/heat stress
- Compressed gases
- Confined spaces
- Cylinder storage
- Electrical
- Ergonomics
- Flammable liquids
- Hazardous wastes
- Noise
- Steam
- Toxic/hazardous substances
- Unguarded machinery
- Welding fumes

**Office Areas**
- Cleaning chemicals
- Ergonomics
- Slips/trips
- Video display terminals

**Patient Care**
- Aerosolized medication
- Aggression/violence
- Biological/infectious wastes
- Electrical
- Ergonomics
- Hazardous drugs
- Latex allergy
- Sharps
- Radiation
- Slips/trips

**Pharmacy**
- Ergonomics
- Hazardous drugs
- Latex allergy
- Wet floors

**Radiology**
- Biological/infectious wastes
- Ergonomics
- Latex allergy
- Radiation- darkroom chemicals
- Ventilation

**Therapy Services**
- Aggression/violence
- Biological/infectious wastes
- Ergonomics
Guidelines conclusion

This document provides a framework for a comprehensive safety and health program in a long-term care home setting. Most of this guideline provides suggestions specific to resident-handling, but the same principles can be applied to other areas of long-term care facilities. Several other hazards associated with these facilities can be found in the appendix on page 7.

The development of an occupational safety and health program in a long-term care setting is a challenging task, but less of a burden when taken on as a team responsibility. A successful injury and illness prevention program can be developed through management and employees time, commitment and resources.

This is a training resource document only and is not a substitute for any of the provisions of the Occupational Safety and Health Act of 1970 or for any standards issued by the U.S. Department of Labor’s Occupational Safety and Health Administration.