# Protecting Nursing Home Workers: OSHA's Safety and Health Program Approach

## Background

- The nursing home industry is one of America's fastest growing industries.
- Approximately 1.6 million workers are employed at 21,000 work sites.
- By the year 2005, industry employment will rise to an estimated 2.4 million workers.

## Bureau of Labor Statistics (BLS) Data

- In 1994, nursing and personal care facilities reported over 221,000 nonfatal occupational injuries and illnesses to BLS.
- Among U.S. industries with 100,000 or more nonfatal injury or illness cases, nursing homes have the third highest rate -- 16.8 injuries and illnesses per 100 full-time workers.

## Major Sources of Injuries and Illnesses - BLS Data

- Resident handling
- Falls
- Contact with objects and equipment
- Assaults and violent acts by persons
- Exposure to harmful substances

## Nursing Home Jobs with the Most Injuries

The BLS data showed that nursing aides, orderlies, and attendants accounted for 70% of nursing home injuries that resulted in days away from work.

Women employees had more injuries that resulted in lost workdays than did men employees.

## OSHA's Role in the Nursing Home Industry

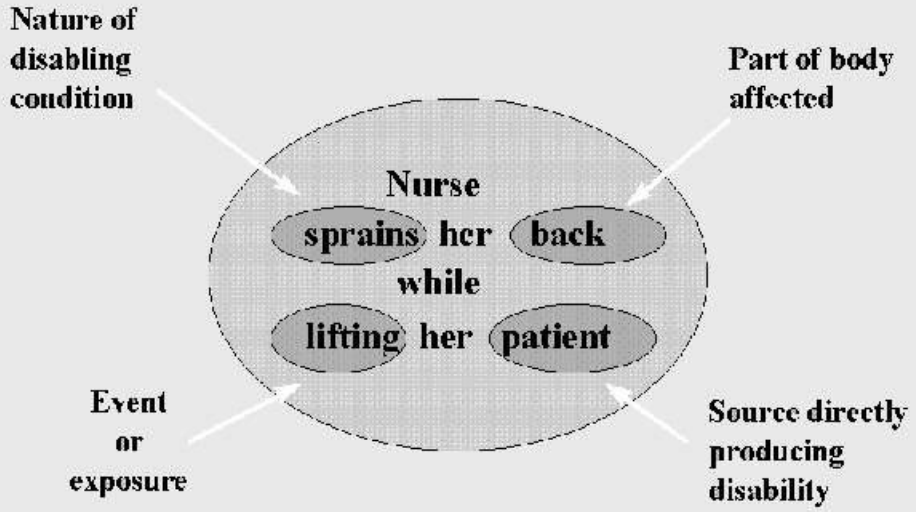
OSHA has begun an outreach and enforcement initiative aimed at reducing injuries and illnesses among nursing home workers.

This initiative emphasizes taking a comprehensive safety and health program approach to address all causes of injuries and illnesses in the industry.

## OSHA's Role (Continued)

Seven states, each with more than 500 nursing homes, have been chosen to be part of OSHA's pilot program in the nursing home. The states are :
Florida; Illinois; Massachusetts; New York; Ohio; Pennsylvania; and Missouri.

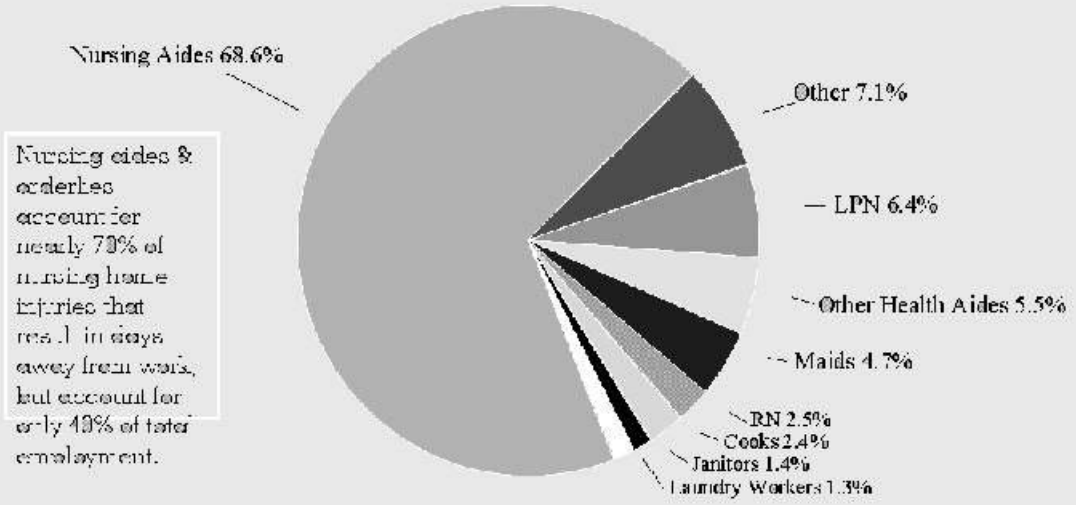
# Injury and Illness Topology




Each injury or illness is described from four viewpoints.

Source: 1994 BLS Survey of Occupational Injuries & Illnesses

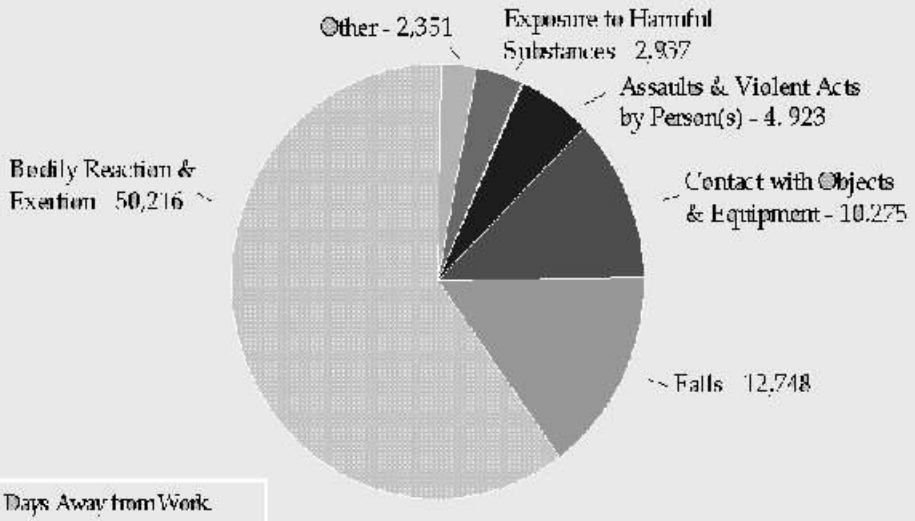
# What Nursing Home Jobs Have the Most Injuries/Illnesses with Days Away from Work?




Nursing aides & orderlies account for nearly 70% of nursing home injuries that result in days away from work, but account for only 40% of total employment.

Source: 1997 BLS Survey of Occupational Injuries & Illnesses
Total number of injuries/illnesses resulting in days away from work = 83,460

## Number of Injuries/Illnesses* by Type of Event, Nursing and Personal Care Facilities, 1994

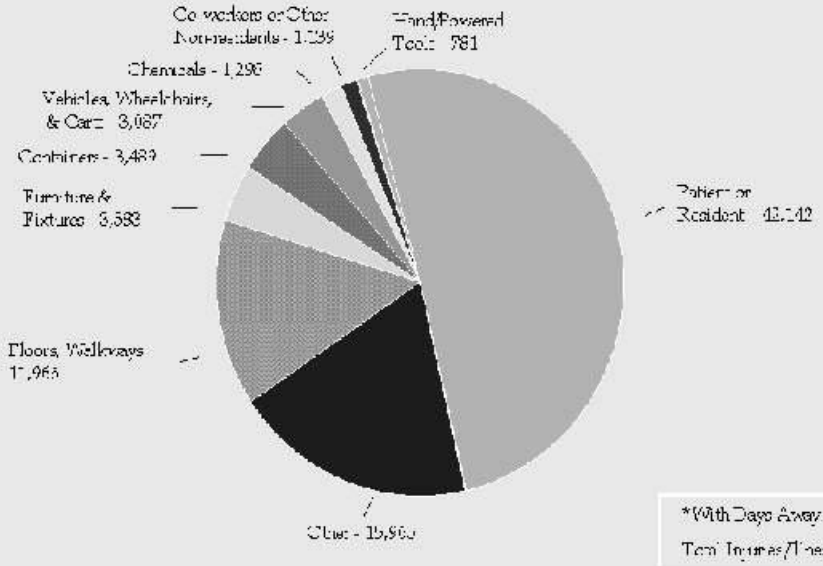



*With Days Away from Work.

Total Injuries/Illnesses - 83,450.

Source: 1994 BLS Survey of Occupational Injuries and Illnesses, unpublished table.

## Source of Injury or Illness Events*, Nursing and Personal Care Facilities, 1994

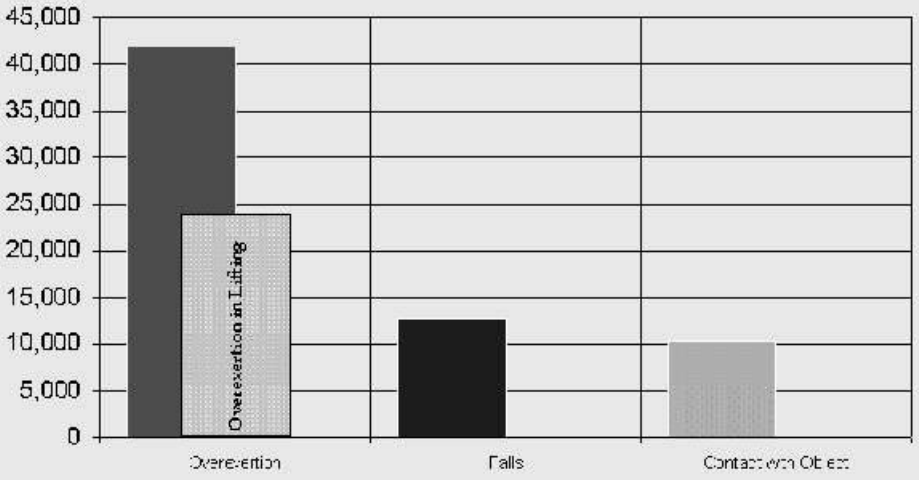



*With Days Away from Work.

Total Injuries/Illnesses - 83,450.

Source: 1994 BLS Survey of Occupational Injuries and Illnesses, unpublished table

# Event or Exposure Causing Injury or Illness Involving Days Away from Work, 1994




Source: 1994 BLS Survey of Occupational Injuries and Illnesses, unpublished table.

## Creating a Safety Culture

## Safety Pays Off in Nursing Homes

- Working safely helps protect employees
- Working safely affects the "bottom line"

## Camden, Maine - 263 Employees

- Problem: low back pain/pulled muscles from patient transfers
- Controls: mandatory two-person lifts where residents can't support their weight; two kinds of lifts, for different uses; gait belts; training from manufacturers of equipment
- Results: Worker's compensation premium dropped from $750,000 to $184,000

## Erie, Pennsylvania - 160 Employees

- Problem: back injuries/high turnover due to lifting residents
- Controls: No-lift policy requiring use of lifting equipment for residents unable to move/walk on their own; notice on beds of what equipment required for each resident; use of electrical cranks on lifts
- Results: Worker's compensation premium dropped from $117,000 to $85,000; only 1 back injury due to lifting since 1992

## OSHA's Purpose

. . . to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources . . .

## All About OSHA

- Coverage
- Standards
  - Development
    Permanent
  - Temporary
  - 5(a)(1)
- Variances

## Workplace Inspections

- Every covered establishment may be inspected
- No advance notice
- Employer may require warrant
- Priorities
  - Imminent danger
  - Catastrophes/Fatal accidents
  - Employee complaints (may be handled by phone/fax)
  - Programmed inspections
  - Followup inspections

## Investigation of Complaints (Phone/Fax)

- Employer notified by phone of complaint allegations
- Followup in writing faxed (or mailed) to employer
- Employer investigates and responds to OSHA
- Complainant advised of employer's response
- Complaint closed with satisfactory response

## Inspection Process

- Inspector's credentials
- Opening conference
- Inspection tour
- Closing conference
- Citations/penalties

## Appeals Process

- Employer
  - Informal conference
  - PMA
  - Notice of Contest
  - Review by OSHRC
  - Appeals in State Plan states
- Employee
  - Contest of abatement period
  - Request for informal review (if complaint) or informal conference

## Responsibilities and Rights

- Employer
- Employee

# Employer Responsibilities and Rights

Employers have certain responsibilities and rights under the Occupational Safety and Health Act of 1970.

The checklists that follow provide a review of many of these. Employer responsibilities and rights in states with their own occupational safety and health programs are generally the same as in federal Occupational Safety and Health Administration (OSHA) states.

## Responsibilities

Employers must:

- Meet the general duty responsibility to provide a workplace free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees, and comply with standards, rules and regulations issued under the Act.
- Be familiar with mandatory OSHA standards and make copies available to employees for review upon requests.
- Inform all employees about OSHA.
- Examine workplace conditions to make sure they conform to applicable standards.
- Minimize or reduce hazards.
- Make sure employees have and use safe tools and equipment (including appropriate personal protective equipment), and that such equipment is properly maintained.
- Use color codes, posters, labels, or signs when needed to warn employees of potential hazards.
- Establish or update operating procedures and communicate them so that employees follow safety and health requirements.
- Provide medical examinations when required by OSHA standards.
- Provide training required by OSHA standards (e.g., hazard communication, lead, etc.).
- Report to the nearest OSHA office within 8 hours any fatal accident or one that results in the hospitalization of three or more employees.
- Keep OSHA-required records of work-related injuries and illnesses, and post a copy of the totals from the last page of OSHA No. 200 during the entire month of February each year. (This applies to employers with 11 or more employees.)
- Post, at a prominent location within the workplace, the OSHA poster (OSHA 2203) informing employees of their rights and responsibilities. (In states operating OSHA approved job safety and health programs, the state's equivalent poster and/or OSHA 2203 may be required.)
- Provide employees, former employees and their representatives access to the Log and Summary of Occupational Injuries and Illnesses (OSHA No. 200) at a reasonable time and in a reasonable manner.
- Provide access to employee medical records and exposure records to employees or their authorized representatives.
- Cooperate with OSHA compliance officer by furnishing names of authorized employee representatives who may be asked to accompany the compliance officer during an inspection. (If none, the compliance officer will consult with a reasonable number of employees concerning safety and health in the workplace.)
- Not discriminate against employees who properly exercise their rights under the Act.
- Post OSHA citations at or near the worksite involved. Each citation, or copy thereof, must remain posted until the violation has been abated, or for three working days, whichever is longer.
- Abate cited violations within the prescribed period.

## Rights

Employers have the right to:

- Seek advice and off-site consultation as needed by writing, calling or visiting the nearest OSHA office. (OSHA will not inspect merely because an employer requests assistance.)
- Be active in your industry association's involvement in job safety and health.
- Request and receive proper identification of the OSHA compliance officer prior to inspection.
- Be advised by the compliance officer of the reason for an inspection.
- Have an opening and closing conference with the compliance officer.
- Accompany the compliance officer on the inspection.
- File a Notice of Contest with the OSHA area director within 15 working days of receipt of a notice of citation and proposed penalty.
- Apply to OSHA for a temporary variance from a standard if unable to comply because of the unavailability of materials, equipment or personnel needed to make necessary changes within the required time.
- Apply to OSHA for a permanent variance from a standard if the employer can furnish proof that his/her facilities or method of operations provide employee protection at least as effective as that required by the standard.
- Take an active role in developing safety and health standards through participation in OSHA Standards Advisory Committees, through nationally recognized standards-setting organizations and through evidence and views presented in writing or at hearings.
- Be assured of the confidentiality of any trade secrets observed by an OSHA compliance officer during an inspection.
- Submit a written request to the National Institute for Occupational Safety and Health (NIOSH) for information on whether any substance in your workplace has potentially toxic effects in the concentrations being used.

# Employee Responsibilities and Rights

Although the Occupational Safety and Health Administration (OSHA) does not cite employees for violations of their responsibilities, each employee "shall comply with all occupational safety and health standards and all rules, regulations, and orders issued under the Act" that are applicable.

Employee responsibilities and rights in states with their own occupational safety and health programs are generally the same as for workers in federal OSHA states.

## Responsibilities

Employees should:

- Read the OSHA poster at the job site.
- Comply with all applicable OSHA standards.
- Follow all employer safety and health rules and regulations, and wear or use prescribed protective equipment while engaged in work.
- Report hazardous conditions to the supervisor.
- Report any job-related injury or illness to the employer, and seek treatment promptly.
- Cooperate with the OSHA compliance officer conducting an inspection if he or she inquires about safety and health conditions in the workplace.
- Exercise employee rights under the Act in a responsible manner.

## Rights

Employees have the right to:

- Review copies of appropriate OSHA standards, rules, regulations, and requirements that the employer should have available at the workplace.
- Request information from the employer on safety and health hazards in the area, on precautions that may be taken, and on procedures to be followed if an employee is involved in an accident or is exposed to toxic substances.
- Receive adequate training and information on workplace safety and health hazards.
- Request that the OSHA area director investigate if he/she believes hazardous conditions or violations of standards exist in the workplace.
- Have an authorized employee representative accompany the OSHA compliance officer during the inspection tour.
- Respond to questions from the OSHA compliance officer, particularly if there is no authorized employee representative accompanying the compliance officer of the inspection "walkaround."
- Observe any monitoring or measuring of hazardous materials and see the resulting records, as specified under the Act, and as required by OSHA standards.
- Have an authorized representative, or themselves, review the Log and summary of Occupational Injuries (OSHA No. 200) at a reasonable time and in a reasonable manner.
- Object to the abatement period set by OSHA for correcting any violation in the citation issued to the employer by writing to the OSHA area director within 15 working days from the date the employer receives the citation.

- Submit a written request to the National Institute for Occupational Safety and Health (NIOSH) for information on whether any substance in the workplace has potentially toxic effects int eh concentration being used, and have their names withheld from the employer, if so requested.
- Be notified by the employer if the employer applies for a variance from an OSHA standard, and testify at a variance hearing, and appeal the final decision.
- Have their names withheld from the employer, upon request to OSHA, if a written and signed complaint is filed.

## 11(c) Rights: Protection for Using Rights

Employees have a right to seek safety and health on the job without fear of punishment. That right is spelled out in Section 11(c) of the Act.

The law says employers shall not punish or discriminate against workers for exercising rights such as:

- Complaining to an employer, union, OSHA or any other government agency about job safety and health hazards;
- Filing safety or health grievances;
- Participating on a workplace safety and health committee or in union activities concerning job safety and health.
- Participating in OSHA inspections, conferences, hearings, or other OSHA-related activities.

If an employee is exercising these or other OSHA rights, the employer is not allowed to retaliate for such activities in any way, such as through firing, demotion, taking away seniority or other earned benefits, transferring the worker to an undesirable job or shift, or threatening or harassing the worker.

If the employer has knowingly allowed the employee to do something in the past (such as leaving work early), he or she may be violating the law by punishing the worker for doing the same thing following a protest about hazardous conditions. If the employer knows that a number of workers are doing the same thing wrong, he or she cannot legally single out for punishment the worker who has taken part in safety and health activities.

Workers believing they have been punished for exercising safety and health rights must contact the nearest OSHA office within 30 days of the time they learn of the alleged discrimination. A union representative can file the 11(c) complaint for the workers.

The worker does not have to complete any forms. An OSHA staff member will complete the forms, asking what happened and who was involved.

Following a complaint, OSHA investigates. If an employee has been illegally punished for exercising safety and health rights, OSHA asks the employer to restore that worker's job earnings and benefits. If necessary, and if it can prove discrimination, OSHA takes the employer to court. In such cases the worker does not pay any legal fees.

If a state Agency has an OSHA-approved state program, employees may file their complaint with either federal OSHA or the state agency under its laws.

## Recordkeeping - Major Concepts

- An injury or illness is considered work-related if it results from an event or exposure in the work environment
- All work-related fatalities are recordable
- All work-related illnesses are recordable
- All work-related injuries are recordable if they require medical treatment or involve loss of consciousness, restriction of work or motion, or transfer to another job

## Recordkeeping - Forms

- OSHA No. 200, *Log and Summary of Occupational Injuries and Illnesses*
- OSHA No. 101, *Supplementary Record of Occupational Injuries and Illnesses*
- Posting requirements
- See BLS "Recordkeeping Guidelines for Occupational Injuries and Illnesses"

## Recordkeeping - Special Issues

- Work relationship
- Back cases - injuries
- Prescription medications
- Identification of illnesses
- Medical treatment

## Sources of Assistance

- Consultation - OSHA Publication 3047
- Voluntary Protection Programs (VPP) - Fact Sheet No. 92-10
- Training and Education - (847) 297-4810

## Keeping Up to Date on OSHA

- Publications & fact sheets: (202) 219-4667
- Internet: http://www.osha.gov and http://www.osha-slc.gov
- CD-ROM: Superintendent of Documents

## Resident Rights

- Older Americans Act
  - Establishes Nursing Home Ombudsman Program in each state
    Responsibilities
    - Monitor performance of agencies dealing with nursing homes
    - Receive/monitor complaints by or on behalf of individual residents
    - Coordinate volunteer programs
    - Carry out public educational programs
    - Comment on state/local policies

## Resident Rights

- Nursing Home Reform Law of 1987
  - Applies to facilities participating in Medicare and/or Medicaid programs
  - Focuses on individuals: entitled to receive all care and services to attain and maintain highest possible functioning in 13 specified areas
  - Establishes "quality of life" requirements for homelike environment and resident choices

## Resident Rights

- Nursing Home Reform Law (cont'd)
  - Establishes resident rights
    - Financial - control own money
    - Privacy
    - Meeting with friends and family
    - Non-discrimination based on payment method
    - Protections against transferring in or out of facilities

## Resident Rights

- Nursing Home Reform Law (cont'd)
  - Establishes uniform assessment for medications, activities of daily living, and customary routines: resident choices about bedtimes, bathtimes, other routines from before they entered the facility
    - ***Basis for individualized care plan***
  - Establishes standards for nursing aid training and competence

## Elements of a Safety and Health Program

- Management Leadership and Employee Participation
- Workplace Analysis
- Accident and Record Analysis
- Hazard Prevention and Control
- Emergency Response
- Safety and Health Training

## Management Leadership and Employee Participation

- Management Leadership
- Employee Participation
- Implementation Tools
- Contractor Safety

## Management Leadership

Visible management leadership provides the motivating force for an effective safety and health program.

## Employee Participation

Employee participation provides the means through which workers identify hazards, recommend and monitor abatement, and otherwise participate in their own protection.

## Implementation Tools

Implementation tools, provided by management, include:

- budget
- information
- personnel
- assigned responsibility
- adequate expertise and authority
- means to hold responsible persons accountable (line accountability)
- program review procedures

## Contractor Safety

An effective safety and health program protects all personnel on the worksite, including contractors. It is the responsibility of management to address contractor safety.

## Workplace Analysis

- Survey and Hazard Analysis
- Inspection
- Hazard Reporting

## Survey and Hazard Analysis

An effective, proactive safety and health program will seek to identify and analyze all hazards. In large or complex workplaces, components of such analysis are the comprehensive survey and analysis of job hazards and changes in conditions.

## Inspection

To identify new or previously missed hazards and failures in hazard controls, an effective safety and health program will include regular site inspections.

## Hazard Reporting

A reliable hazard reporting system enables employees, without fear of reprisal, to notify management of conditions that appear hazardous and to receive timely and appropriate responses.

## Accident and Record Analysis

- Accident Investigation
- Data Analysis

## Accident Investigation

An effective program will provide for investigation of accidents and "near miss" incidents, so that their causes, and the means for their prevention, are identified.

## Data Analysis

An effective program will analyze injury and illness records for indications of sources and locations of hazards, and jobs that experience higher numbers of injuries. By analyzing injury and illness trends over time, patterns with common causes can be identified and prevented.

## Hazard Prevention and Control

- Hazard Control
- Maintenance
- Medical Program

## Hazard Control

Workforce exposure to all current and potential hazards should be prevented or controlled by using engineering controls, wherever feasible and appropriate, work practices and administrative controls, and personal protective equipment.

## Maintenance

An effective safety and health program will provide for facility and equipment maintenance, so that hazardous breakdowns are prevented.

## Medical Program

An effective safety and health program will include a suitable medical program where it is appropriate for the size and nature of the workplace and its hazards.

## Emergency Response

Emergency preparedness - There should be appropriate planning, training/drills, and equipment for response to emergencies.

First aid/emergency care should be readily available to minimize harm if an injury or illness occurs.

## Safety and Health Training

Safety and health training should cover the safety and health responsibilities of all personnel who work at the site or affect its operations.
It is most effective when incorporated into other training about performance requirements and job practices. It should include all subjects and areas necessary to address the hazards at the site.

## Safety and Health Hazards in Nursing Homes

- Bloodborne Pathogens
- Tuberculosis
- Workplace Violence
- Other Hazards

## Bloodborne Pathogens

Pathogenic organisms that are present in human blood and can cause disease in humans. These include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

## 29 CFR 1910.1030 Bloodborne Pathogens Standard

- Scope and Application
- Definitions
- Exposure Control Plan
- Methods of Compliance
- HIV and HBV Research Laboratories and Production Facilities
- Hepatitis B Vaccination and Post - Exposure Follow-up
- Communication of Hazards to Employees
- Recordkeeping
- Effective Dates

## Highlights of 29 CFR 1910.1030

The standard applies to all employees with occupational exposure to blood and other potentially infectious materials.

## Highlights of 29 CFR 1910.1030 (Cont'd)

Exposure Control Plan includes :

- The written exposure determination;
- The procedures for evaluating the circumstances surrounding an exposure incident; and
- The schedule and method of implementing other sections of the standard.

## Highlights of 29 CFR 1910.1030 (Cont'd)

Methods of Compliance

- Universal Precautions
- Engineering and Work Practice Controls
- Personal Protective Equipment
- Housekeeping

## Highlights of 29 CFR 1910.1030 (Cont'd)

Hepatitis B Vaccination

- HBV vaccination must be made available within 10 working days of initial assignment to all employees who have occupational exposure.
- HBV vaccination must be made available without cost to the employee, at a reasonable time and place, and by a licensed health care professional.

## Highlights of 29 CFR 1910.1030 (Cont'd)

Post-exposure Evaluation and Follow-up

The employer must make a confidential medical evaluation and follow-up to employees following an exposure incident.

## Highlights of 29 CFR 1910.1030 (Cont'd)

Communication of Hazards to Employees

- Labels and signs
- Information and training

## Highlights of 29 CFR 1910.1030 (Cont'd)

Recordkeeping

- Medical Records
- Training Records

## Tuberculosis (TB)

- Infectious disease caused by the bacterium, *Mycobacterium tuberculosis*
- Spread by airborne droplets generated when a person with TB disease coughs, sneezes, speaks, or sings
- Infection occurs when a susceptible person inhales droplet nuclei containing the bacteria which become established in the body
- Mantoux tuberculin skin test detects TB infection, positive results indicate infection. Other tests needed to confirm TB disease

## TB Occurrence

- Since 1985, the incidence of TB in the general U.S. population has increased 14% reversing a 30 year downward trend.
- However, during 1994 and 1995, there has been a decrease in TB cases in the U.S. likely due to increased awareness and efforts in prevention and control of TB.
- Cases of multi-drug resistant TB have recently been reported in 40 states.
- Worldwide, 8 million new TB cases and 3 million deaths occur annually.

## Why Is TB Increasing?

Multiple contributing factors:

- Homelessness
- Intravenous drug use
- Overcrowding in institutional settings
- HIV infection
- Reduced resources for TB control and treatment
- Immigration from high TB prevalence areas

## Tuberculosis - OSHA Enforcement

On 2/9/96, OSHA issued agency-wide CPL 2.106, "Enforcement Procedures and Scheduling for Occupational Exposure to Tuberculosis."

This enforcement directive cancels the enforcement guidelines issued on 10/8/93.

## Tuberculosis - OSHA Enforcement (Cont'd)

OSHA's CPL 2.106 is based on the Centers for Control and Prevention (CDC) "Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Facilities" issued on 10/28/94.

OSHA believes these guidelines reflect an industry recognition of the hazard as well as appropriate, widely accepted standards of practice to be followed by employers in carrying out their responsibilities under the OSH Act.

## Workplaces Identified by CDC with High Incidences of TB

- Health Care Settings
- Correctional Institutions
- Homeless Shelters
- Long-term Care Facilities for the Elderly
- Drug Treatment Centers

## Highlights of CDC Guidelines and OSHA Requirements

- Determine the risk of exposure
- Early diagnosis, isolation, treatment
- Requirements for isolation
- Training of workers
- Skin testing
- Respirators - OSHA standard 1910.134
- Other applicable standards - recordkeeping, employee access to records, accident prevention signs

## Workplace Violence

Any physical assault, threatening behavior, or verbal abuse occurring in the workplace.

The workplace may be any location either permanent or temporary where an employee performs any work-related duty.

## Acts of Aggression Which May Indicate Risk

- Disorderly conduct
- Verbal threats to inflict bodily harm
- Fascination with guns or other weapons
- Obscene phone calls
- Intimidating presence
- Harassment of any nature

## Types of Workplace Violence Incidents

Based upon the relationship between the assailant/worker/workplace. violent incidents can be divided into categories:

- violence by strangers
- violence by customers/clients/patients
- violence by co-workers
- violence by personal relationship

## Types of Workplace Violence Incidents (Cont'd)

Homicides

- Leading cause of job-related deaths for women. second leading cause for men
- Claimed the lives of 1,071 lives in 1994 (BLS data)
- Approximately 3 workers died each day under violent circumstances in 1994

Nonfatal Assaults

- Between 1987-1992, one million persons were annually assaulted at work

## Establishments Affected by Workplace Violence

According to the Bureau of Labor Statistics, the highest number of homicides occur in night retail establishments.

The highest number of nonfatal assaults occur in the heath care and social service sectors.

## Health Care Establishments

Nonfatal assaults were primarily by patients/residents on nursing staff in health care institutions.

According to one study (Goodman et al., 1994), between 1980-1990, 106 violence related deaths occurred among health care workers.

## Nursing Homes

- BLS 1994 data showed more than 4900 assaults and violent acts against employees in nursing homes.
- Nursing aides and orderlies accounted for more than 50% of the assault victims.
- Most of the violent acts involved hitting, kicking, and beatings.

## Examples of Why Health Care Workers are at Risk Of Work-Related Assaults

- Low level staffing level during times of increased activity;
- Isolated work with patients/residents during examinations or treatment; and
- Lack of training of staff in recognizing and managing escalating hostile and assaultive behavior.

## OSHA Guidelines - Overview

Because of the high incidence of workplace violence, OSHA developed in 1996 a set of voluntary guidelines to prevent workplace violence.

The guidelines cover a broad spectrum of workers (nearly 8 million) in psychiatric facilities, hospital emergency departments, drug treatment centers, community care and mental health facilities, pharmacies and long-term care facilities.

## Violence Prevention Program Elements

- Management Commitment and Employee Involvement
- Worksite Analysis
- Hazard Preventing and Control
- Training and Education
- Recordkeeping and Evaluation of Program

## Appendices

- SHARP Staff Assault Study
- Workplace Violence Checklist
- Assaulted and/or Battered Employee Policy
- Violence Incident Report Forms
- Sources of OSHA Assistance
- Suggested Readings

## Availability of Guidelines

The OSHA "Guidelines for Preventing Workplace Violence for Health Care and Social Service Workers" are available on the Internet at http://www.osha.gov under "What's New."

## General Duty Clause

Section 5(a)(1) of the OSH Act requires that "Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees."

## General Duty Clause (Cont'd)

The general duty clause is used only here there is no OSHA standard that applies to the particular hazard involved.

Examples of workplace hazards to which the general duty clause may apply include occupational exposure to TB and workplace violence.

## General Duty Clause (Cont'd)

Four elements are required for issuing general duty clause violations:

- The employer failed to keep the workplace free of a hazard to which employees of that employer were exposed
- The hazard was recognized
- The hazard was causing or was likely to cause death or serious physical harm
- There was a feasible and useful method to correct the hazard

# Other Safety and Health Hazards in Nursing Homes

There are other safety and health hazards that may be present in nursing homes. The hazards may be categorized as biological/infectious agents, chemical, environmental/mechanical, ergonomic, physical, and psychosocial.

**Biological hazards** include agents such as viruses, bacteria, parasites, or fungi which may be transmitted by contact with infected residents or contaminated body secretions/fluids to other individuals. Examples of these hazards in nursing homes include hepatitis B virus, human immunodeficiency virus, and tuberculosis. Areas within the nursing home where these hazards may be located, if applicable, include central supply, environmental services, laboratory, laundry, resident care, radiology, and therapy services.

**Chemical hazards** include various forms of chemicals such as medications, aerosols, vapors, particulates, and solutions that are potentially toxic or irritating to a body system. Examples found in nursing homes include cleaning agents/solvents, disinfectants/sterilizing agents, hazardous drugs, and latex allergies. These hazards may be located in these areas: central supply; environmental services; food services; laboratory; laundry; office; resident care; and the pharmacy.

**Environmental/mechanical hazards** include factors in the work environment that cause or may create a potential for accidents, injuries, strain, or discomfort. Examples found in nursing homes include tripping hazards, unsafe/unguarded equipment (wheelchair, ladder, mixer), slippery floors, confined spaces, air quality, and cluttered or obstructed work areas/passageways. Areas in which these hazards may be found include central supply, corridors, environmental services, food services, laundry, maintenance and engineering, office areas, resident care, pharmacy, and construction/renovation (where applicable).

**Ergonomic hazards** include lifting, pushing/pulling, twisting, and awkward positions. Examples found in nursing homes include resident handling, lifting, awkward positions, and poor lighting. These hazards may be found in areas such as central supply, environmental services, food services, laundry, maintenance and engineering, offices, resident care, pharmacy, radiology, and therapy services.

**Physical hazards** are agents in the work environment that can cause tissue trauma. Examples found in nursing homes include aggression/violence (resulting from a resistive/combative resident or family), cold/heat stress, electrical hazards, fire, radiation, noise, and sharps (broken glass, needles, razors, kitchen equipment). These hazards may be found in nursing homes in environmental services, food service, laundry, maintenance and engineering, resident care, therapy services, and construction/renovation (where applicable).

**Psychosocial hazards** are factors and situations encountered or associated with the job or work environment that cause or create a potential for stress, emotional strain, and/or interpersonal problems. Examples in nursing homes include aggression/violence, shift work, and emotional stress. These hazards may be found in almost all areas of the nursing home but especially in resident care and therapy services areas.

## Resident Handling

- Major cause of injuries in nursing homes
- Caused by lifting or transferring residents
- Reasons injuries occur include overexertion, work conditions, and resident condition

## Assist Devices

# Resident Handling

Resident handling is the major cause of injuries in nursing homes. These injuries are caused by lifting or transferring residents. Moving residents who has limited ability to assist have caused low back pain and disability among nursing home employees. There are many reasons why the injury occurs, including overexertion, fitness level of the employee, skill, work conditions, resident condition, and moves per shift.

To help prevent or minimize injuries caused by lifting residents, there are various types of assist devices that can be used for this purpose. Assist devices have been commonly used to eliminate or reduce the forces on the back and arms of the employee. Assist devices also contribute to comfort and security of the resident. An assist device can be mechanical where human strength is supplemented with mechanical power, or a device that improves posture, or a device that allows more people to assist. The condition of the facility and the resident need to be assessed in order to select an appropriate assist device.

Some nursing home personnel however have been reluctant to use mechanical assist devices for a variety of reasons including : too time consuming to use; residents are fearful of the device; the device was broken or unsafe; the device was not available or stored too far away; accessories for the lifting device were not available; and the nursing assistant was never trained to use the device. In most cases reluctance to use assist devices has been overcome with encouragement from management in the form of employee involvement in the selection and availability of equipment, training, and maintenance.

Assist devices can be placed in several categories which include:

Lateral transfer assist devices in which a resident is transferred from one horizontal position to another horizontal position (e.g. bed to gurney). Examples of these devices are:

- Lift sheets, which may be strong draw sheets preferably with handles. A trained person is on one side of the resident, the sheet is lifted or pulled up in a bed or pulled over to a gurney. These devices should be used in conjunction with a friction reducing device.

- Slide boards - the resident is positioned onto the board (approximately 6 foot x 2 foot), then the board is pushed/pulled into the new location. The board can be used in combination with a lift sheet.

Assist devices in which residents can be moved between sitting and standing. With this device, the resident is cooperative and can bear weight. Examples of this device include:

- Walking belts with handles - The belt (about 4 inches wide) is fastened snugly around the lower abdomen (hip area). The employee grips the handles to pull the resident to a

standing position. The handles should allow the employee to obtain a comfortable secure grip. Employees should be taught to rock and pull, and not lift, while using the belt.

- Sit/stand hoist - The hoist can be used to assist the employee in transferring the residents to or from a seated position.

Assist devices that are used to reposition the resident. This device requires resident to have upper body strength. An example of this type of device is the

- Slide board - the board enables the resident who has upper body strength to slide from one location to another. The board is rectangular with a smooth slippery surface for ease of transfer.

Assist devices for toileting and bathing. An example of this device is the

- Toileting/Shower chair - this device is a heavy chair with a padded removable seat. The seat is adjustable, and the arms are removable to improve access during lifting. The chair rolls, and has brakes and comes with a seat belt. The chair must be able to fit over the toilet.

Assist devices that are used to transfer a resident. This device is used when the resident is heavy, or is not cooperative, or cannot bear weight. An example is a

- Hoist - a variety of hoists are available to lift a resident. The hoist is activated with a hand pump (requires bending), crank or push button. Slings (one or two piece) are placed under the resident and attached to the lift. Many hoists are available with static bases which enable the chair or sling component to be swiveled over and lowered into the bed.

In addition to selecting the proper type of assist device, assist devices require adequate storage area, sufficient working space, and appropriate floor surfaces. Assist devices need to be stored and in some cases, the batteries recharged. The storage area should be located within close proximity to the resident handling tasks. Moving a resident with an assist device requires space. Sufficient working space is required particularly around the bed, toilet, and bathing areas. Floors should be even, so that the assist devices can roll without stopping or getting stuck. Also, the assist device must be inspected periodically to ensure proper working order.

Other devices can be used to prevent back injuries among nursing home employees. These devices include ramps, hoists, or scales. Weighing the resident can be accomplished by integrating a scale into the ramp, hoist or bed. This device eliminates the need to transfer to/from a scale.