General Introduction to Ergonomics
Training for Home Care Workers

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Training Objectives

1. To understand workplace injuries and symptoms of musculoskeletal disorders
2. To understand workplace injury risk factors
3. To understand and discuss possible ergonomic solutions
4. To understand and discuss possible “action” steps for workers
What is Ergonomics?

- A science of fitting jobs to the workers.
- It focuses on designing workstations, tools and work tasks for safety, efficiency and comfort.
- Ergonomics seeks to decrease fatigue and injuries, along with increasing comfort, productivity, job satisfaction, and SAFETY.
What are common workplace injuries that ergonomics can help prevent or improve?

- **Injuries** to the muscles, tendons, ligaments, joints, nerves and discs that are caused or aggravated by our actions and/or environment that does not follow ergonomic principles.

- Also known as “MusculoSkeletal Disorders”.
What are Musculoskeletal Disorders?

- **Injuries** to the muscles, tendons, ligaments, joints, nerves and discs that are caused or aggravated by our actions and/or environment that does not follow ergonomic principles.
Anatomy Review

- Muscles – Provide the power for you to move your body parts
- Ligaments – Connects bone to bone, stabilizing the joints
- Tendons – “Pulleys” that attach muscle to bone, helping to move body parts
- Joints – Connection between bones.
- Nerves – Carry messages between the brain and other parts of the body.
What happens when you use your muscles too much?

When you use your muscles too much, they get little tears...
This makes your muscle swell and feel ...
These are the warning signs of MusculoSkeletal Disorders:

- pain
- numbness
- tingling
- weakness
- swelling
- hot feeling

If you feel any of these symptoms, it’s time to take action!
Seek early medical treatment

Take Action!

The longer you have symptoms without treatment, the harder it will get to treat them successfully later!
Workplace Injuries Among Service Workers

- Home care workers perform similar workplace tasks as Housekeepers, Dishwashers, Cooks, Servers, and Nurses Aides.

- The following chart shows workplace injury rates among these workers.
Injuries Among Service Workers

Cumulative Trauma Injuries
Comparison among hotel service workers

Rate, per 100 emps.

- Housekeeper: 3.2
- Dishwasher: 2.0
- Cook/Kitchen: 1.7
- Server: 1.1
Injury Claims Resulting from Patient Handling Nurses and Nurses’ Aides (n = 630)

1997-2003
The activities with the highest risk factors

- Lifting, assisting or pulling patients up in bed account for approximately 60% of ergonomic injuries for nursing home workers.
Examples of a ‘Best Practice’
Patient Handling

- Some senior facilities have a “No-Lift Policy” or “Minimal Manual Lift” policy to avoid worker injuries.
Home Care Workers

How can we prevent workplace injuries?
To Prevent Musculoskeletal Workplace Injuries

- Identify ergonomic risk factors
  - Ergonomic risk factors are workplace situations that cause wear and tear on the body and can cause injury
- Find ways to reduce or eliminate them
Identifying Common Risk Factors & Solutions

- **Risk Factor:** Awkward Posture
- **Definition:** Frequent or prolonged bending, reaching, kneeling, squatting, or twisting any part of your body
Risk Factors & Solutions

Possible Solutions: Redesign tasks and equipment to keep the body in more “neutral” positions.
Risk Factors & Solutions

- Risk Factor: Forceful Motion
- Definition: Excessive effort needed to do tasks such as pushing, pulling, pounding, lifting
Risk Factors & Solutions

- Possible Solutions:
  - Redesign task to reduce the exertion needed;
  - get assistance;
  - use mechanical assists
Risk Factors & Solutions

- **Risk Factor:** Direct Pressure
- **Definition:** Prolonged contact of the body with a hard surface or edge
Possible Solutions:
Improve tool and equipment design or layout to eliminate pressure; provide cushioning material
Risk Factors & Solutions

- **Risk Factor:** Vibration
- **Definition:** Using vibrating tools or equipment
Risk Factors & Solutions

Possible Solutions:

- Avoid tight grips
- Grip loosely and alternate hands frequently
- Use extension hoses and tools to reduce contact with vibrating equipment
Risk Factors & Solutions

- **Risk Factor: Work Stress**
- **Definition:** Includes fast-paced work, inadequate breaks, employer mood swings, split work shifts, poor work organization, or poor supervision
Possible Solutions:
- Establish reasonable workload,
- sufficient breaks,
- task variety,
- individual autonomy
Risk Factors & Solutions

- **Risk Factor:** Repetition
- **Definition:** Making the same motion over and over
Risk Factors & Solutions

Possible Solutions: Redesign task to reduce repetitions; alternate hands frequently, increase rest time between repetitions; rotate among tasks with different motions
Discussion:

- How many risk factors do you face in your work?
- Which ones are the most common and what are some possible solutions?
Risk Factors & Solutions

- The more risk factors you face, the greater your chance of injury.
- The longer you are exposed to a risk factor, the greater your chance of injury.
- By reducing or eliminating risk factors, the chance of injury can be decreased.
Take Action!!

- Talk to other home care workers
- Talk to your employer: employer is responsible for work environment.
- Organize a safety committee to discuss and prevent workplace injuries.
Employer is responsible when:

- More than one employee has been diagnosed with an ergonomic injury
- From the exact same tasks
- Injury has been diagnosed by a doctor as work related
Cal/OSHA

- Employers must follow workplace safety regulations made by a government agency called the Division of Occupational Safety and Health (DOSH), better known as Cal/OSHA. These regulations protect workers from hazards, illnesses, and injuries in the workplace.
If an employer violates such regulations, a health and safety complaint can be reported to Cal/OSHA. Complaints are confidential. Cal/OSHA can investigate to see if the workplace is following these safety regulations.
In Conclusion:

Remember to...

- Reduce and eliminate ergonomic risk factors
- Get early treatment if symptoms arise
- Take Action!!
  - Safety Committee
  - Talk to your employer who is responsible for your safe work environment
  - Cal/OSHA
Questions

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Thank You!!

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