



## PERSONAL ATTENDANT CARE

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Occupational Health & Safety	
Musculoskeletal Prevention	
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<b>REVIEW DATE</b> NEW	

### OPERATIONAL PROCEDURES

#### Preamble

Personal Attendant Care Inc. is committed to reducing risk and preventing musculoskeletal injuries, taking into account the person, task, equipment, load and workplace. To identify the main causes of musculoskeletal injuries, identify effective control measures, provide mandatory lifts and transfer training on induction and reduce the cost of human suffering which in turn will reduce considerable financial risk to Personal Attendant Care Inc.

Key elements of a successful Musculoskeletal Disorders (MSD) Prevention and Awareness Program include: management commitment, worker involvement, training and education, identification of risk factors in job duties, development of solutions and ongoing evaluation.

#### Operational Procedures

1. All employees will receive annual communication and education on the MSD Prevention and Awareness Program . This may be completed by way of information sheets, newsletters, posters, department meetings. Education may include:
  - a. Understanding of potential MSD risks
  - b. Awareness of potential MSD causes and symptoms
  - c. Awareness of common prevention techniques and some potential treatments
  
2. A worksite (client homes) analysis and assessment of workplace practices are conducted every six months to identify duties and equipment that may contain risk factors, causes and possible musculoskeletal hazards. The worksite analysis includes:

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- a. Review of equipment utilizing the Equipment Check form
  - b. Review and input Monthly Indicators and severity rates
  - c. Identifying risk factor causes through Incident Reports and Potential Health & Safety records
  - d. Review of Workplace Safety & Insurance Board (WSIB) and injury reports
  - e. Follow up by Supervisor/Manager
3. After the worksite analysis and assessment, types of MSD hazards and prevention control measures that may be in place, or considered as additional improvements include:
    - a. Engineering controls (ie. Modifying equipment or office furniture)
    - b. Administrative or work practice controls
    - c. Personal protective equipment
  4. An evaluation of information retention and success of control measures to decrease or remove the risk and hazards related to MSD's will occur. The evaluation may consist of, but is not limited to:
    - a. A review of MDS related incidence
    - b. Employee feedback to the Supervisor
    - c. Documented observation of work practices
    - d. Post worksite analysis and assessment
  5. The Chief Executive Officer shall ensure all employees are acknowledged for their efforts in increasing awareness and decreasing MSDs. This may include acknowledgement during a staff meeting, a newsletter, Annual General Meeting and/or staff recognition event.

### **Employee Responsibilities**

- Employees are responsible to be actively involved in the MSD Prevention Program
- Employees are responsible to work in a safe manner and perform each task according to safe work practices
- Employees are required to report any hazard or potential risk to their supervisor either by telephone or submitting a Potential Health and Safety Risk form.
- Employees will gain general knowledge in recognizing MSD's in the workplace, assessing the workplace and work practices to identify MSD's, implementing controls to minimize the impact and prevent MSD's and evaluating the workplace to see if initiatives have been met.

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### **Employer Responsibilities**

- Accept referrals and provide assessments and support of employees suffering adverse health affects due to moving and handling.
- Provide advice to Personal Support Workers and administration staff on moving and handling issues.
- Offer education/ advice to departments or individual staff / client on equipment issues and needs.
- Co-ordinate training for all permanent and temporary staff employed by Personal Attendant Care Inc.
- Ensure that manual handling training records are up to date.
- Reinforce good manual handling techniques and safe practice.
- Monitor the completion and quality of manual handling risk assessments.
- Liaise with managers and, where appropriate, follow up accidents/incidents reports.
- Provide return to work advice and assessments for staff.
- Make, monitor and audit all the manual handling equipment used in training and ensure manual handling equipment is being monitored, audited and reviewed by Supervisor/Management to ensure the equipment is in good working order and maintained to a high standard.
- Monitor and audit the number of injuries related to manual handling including investigating the circumstances surrounding the injury.
- Monitor and review the number of staff trained for safe handling procedures.

### **Supervisor/Manager Responsibilities**

- Communicate the operational procedures to all employees within their area of responsibility
- Ensure employees are aware of the Lift & Transfer Operational Procedures
- Ensure their own training needs are met in terms of keeping up to date with new developments / national guidelines in relation to manual handling
- Report any hazards or potential hazards to the employee and employer
- Conduct health and safety inspections every six (6) months at client homes
- Ensure that any employee returning to work after long term absence or who has sustained an injury at work as a result of manual handling is referred to the appropriate training sessions.

### **What are Musculoskeletal Disorders (MSD's) ?**

A musculoskeletal disorder is defined as an injury or disorder of the muscles, tendons, ligaments, joints, nerves, blood vessels, or related soft tissues. They may also be referred to as repetitive strain injuries, cumulative trauma disorder or repetitive motion injuries. MSD's are not a medical diagnosis, rather an umbrella reference to certain types of injuries. These may include but is not limited to: sprains, strains, inflammation,

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degeneration, tears, back pain, rotator cuff syndrome. MSD's may be caused by or aggravated from work, home, and family life or recreational activities. Symptoms may include discomfort, pain, fatigue, swelling, stiffness, numbness and tingling.

## **Basic Ergonomic Models**

### **Posture**

Because of static loading of muscles and joints, even natural postures cause aches, pains or other discomfort after an extended period of time. This is why we change postures many times through the night in our sleep. However, job tasks often require repeated, sustained postures that over time can lead to MSDs.

In addition to hand and arm postures, there are two (2) basic sets of whole-body postures: sitting and standing. In either case, a fundamental aspect of proper posture is head position. The head always should be centered directly over the spinal column. An average human head weighs approximately 10 pounds—the weight of a typical bowling ball. Failing to keep one's head positioned directly over the spinal column results in constant and unnecessary muscular exertion and strain in the neck and back.

Ergonomic researchers long have recognized that lower back pain is caused by either too much or too little of sitting or standing postures, as well as improper posture. Completely sedentary jobs, for example, are related to lumbar disk damage, despite the fact that such jobs entail little or no heavy lifting or muscle loading.

Not surprisingly, seated posture is affected by both chair design and chair use (sitting style). Seat height should be adjustable, allowing workers to distribute their weight evenly along the length of their upper legs, with their feet flat on the ground. Slouching postures are more common when the seat is too low, increasing the relative height of a worker's knees.

### **Reaching**

Repetitive overreaching (ie, strenuously stretching the arms beyond their normal range of reach) can damage muscles, tendons and ligaments. Simple strategies to reduce overreaching include using chairs with wheels to improve maneuverability and standing to reach equipment rather than stretching to do so.

Safe repeated reach distances vary from individual to individual, and while workplace layout traditionally has been based on average worker proportions, employers increasingly seek adjustable workplace equipment modules to accommodate different workers' needs.

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## Lifting

Lifting clients is a leading risk factor for back MSDs. Among Personal Support Workers, harmful postures occur more often during client handling than any other work task. The maximum weight load for lifting, 40lbs, must be adhered to at all times.

Theoretically, the optimal technique for lifting is simple: Bend at the knees and lift with the leg muscles, while keeping the back straight and perpendicular to the ground and the load close to the body. This seems easy enough when lifting freight or factory equipment, but can be difficult when helping a client out of a wheelchair. Although some researchers have found that proper lifting technique reduces worker injuries, others found that strenuous lifting using any technique increases the risk of MSDs. Remember, to seek help if the client is too heavy for you.

## Mechanical/ Manual Lift

1. Ensure that the Personal Support Workers have the most recent Client Service Plan and contact the Client Service Supervisor if client's direction differs from this plan.
2. Complete Equipment Check form to ensure the lift or equipment used for the transfer is in good working order. Ensure slings are free from rips and frays.
3. Do not use mechanical lift if it is not in safe working order; Lock Out/Tag Out and notify the Client Service Supervisor immediately for alternate care options.
4. Ensure the working area is safe and clear of obstacles.
5. Explain procedure to the client and ensure instructions are clear and simple.
6. Lock the wheels of all equipment when stationary.
7. Adjust the height of the bed and remove the bed rails if applicable.
8. Place the sling(s) in the appropriate place under the client.

### If lying in bed:

- a) When using a universal/hammock sling, roll the client away from you.
- b) Roll the sling in half and position the sling so that the bottom of the sling aligns with the base of the spine.
- c) Roll the client back to you and position him/her on the flat section of the sling.
- d) Feed the leg sections under the client's thighs and then draw them up between the client's thighs.
- e) When using band slings, place one under the client's thighs and the other one under their back.

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**If the client is in the chair:**

- a) Assist the client to lean forward, placing the sling down between the chair and the client's back (support the client to prevent a fall/slip).
  - b) Position the sling equally around both sides of the client's body.
  - c) Draw each of the leg sections along and under the client's thigh and then draw them up between the client's thighs.
9. Place the mobile lifting device close to the bed with the base under the bed and the boom (bar) above the client's waist level.
  10. Lower the boom slowly to the point where the hooks can be attached to the sling comfortably and safely.
  11. Attach the slings to the lift with the hooks facing away from the client. Attach the slings so that they cross over in front of the client. E.g. the section of the sling that goes under the right leg should be crossed over the front of the client and be attached to the left side. Ensure hooks and attachments are secure.
  12. Raise the client off the bed slowly with a smooth, gentle movement. Pause to allow the client to adjust, ensure the client feels safe and secure.

**NOTE: If the client is off balance, lower the lift and reposition him/her.**

13. While the client is still above the bed, turn the client to face the mast of the lift.
14. Gently turn the lift and guide or move the client towards the chair where he/she is going to be placed.
15. Bring the client above the chair while gently lowering the client into the chair. Ensure he/she is positioned in the chair properly. Ensure the client is safe and comfortable.
16. Remove the sling(s) and straps carefully, first from the lifting device, then from the client.
17. Place the slings and the attachments with the lift and return to appropriate area as directed by client.
18. Place the battery on re-charge if a battery-operated device has been used.
19. Be sure all parts and the device are left in good working order for next use.

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20. When lifting a client from chair to the bed, the same procedure is followed in reverse.

21. The Personal Support Worker providing service to this client consistently uses the lift for each and every lift/transfer with this client. Unless an

22. Occupational/Physiotherapist recommends that this lift be used during specific transfers only.

Whenever possible, workers also should vary postures when performing repetitive, strenuous tasks. Frequent, short breaks involve changes in posture every 15 to 30 minutes, then a rest for 30 to 60 seconds. If you have been sitting, stand and walk around. If you've been engaged in strenuous lifting, do some slow stretches and sit down for a minute.

### **Recovery Time**

In addition to short breaks during tasks requiring muscular exertion, regular physical and psychological breaks throughout the day are vital to a healthy workplace. Beneficial breaks can be as short as a few minutes. Muscle fatigue is exacerbated by prolonged, repeated strain uninterrupted by periods of relaxation. Breaks from work reduce the risk of musculoskeletal injury. Workers should take rest breaks between heavy lifting tasks.

### **Grip**

Grip refers to the fit between hand and object, and the resulting manual exertion and muscular strain encountered when grip-requiring tasks are performed. Repeated or sustained improper forceful gripping can cause damage to the hand's soft tissues. This is a source of hand and wrist injuries among sonographers, for example. As with heavy lifting, short breaks, varied task postures and rest periods between tasks may reduce the risk of grip-related injuries.

### **Human Factors**

Ergonomics traditionally has focused on physical sources of stress and strain in the workplace. Increasingly, however, experts are recognizing that psychological and neurological factors also play a role in workers' vulnerability to musculoskeletal injury.

Emotions can affect ergonomic health. Anxiety, for example, increases muscle tension and the likelihood of muscular trauma or pain during (or resulting from) repetitive job tasks. This, in turn, can increase job task anxiety. MSDs of the upper extremities have been tied to work stress, and in some studies, workplace stress-reduction regimens have resulted in reduced MSD rates or decreased severity of workers' symptoms.

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Job attitude and cognitive style (for example, how one copes with pain) also can affect the course of musculoskeletal complaints. Workers who believe that they understand the source of their back pain, for example, recover more quickly than those who express confusion over the cause of their discomfort. This may indicate that better-informed clients can accommodate or adapt to their injuries and hence recover more quickly.

### **Workstation Design**

Workplace layout or design fundamentally determines ergonomic injury rates. Workplace layout refers to the arrangement of commonly used tools and equipment. In addition to facilitating efficient work flow, workplace layout should reduce the risk of injuries by reducing or eliminating the need for improper lifting or repetitive reaching beyond comfortable limits.

Workplace layout should allow each worker to adjust his or her equipment, such as chairs and computer monitors, for his or her particular needs. Rather than stooping or leaning in front of a computer monitor, for example, technologists should adjust equipment so that computer monitors are at eye level. At a monitor, the technologist should sit with back straight, feet flat on the floor and the keyboard situated over the knees or lap to avoid reaching or stooping typing postures. The angle between the upper arm and forearm should be between 70[degrees] and 135[degrees], and the angle between the torso and thighs should be at least 100[degrees]. If a fixed-height computer workstation desk is used, then vertically adjustable keyboard trays should be installed. Workstations and desktops should be organized with the most commonly used items within easy reach of the chair, and with the space beneath the desk uncluttered to allow proper seated postures of the feet and legs.

When workers are busy, they often believe that adjusting equipment is an unnecessary demand on their time. However, studies have shown that fatigue and repeated muscular injuries--and associated reductions in productivity--result from poorly designed workplace layouts and poor work postures.

### **Equipment**

Manufacturers have taken to labeling equipment "ergonomic," but because ergonomic fit varies between individuals, this is sometimes a misleading description. In most cases, a product's range of adjustability is a reasonable approximation of its "ergonomicity." For example, seat height, depth, tilt, and back and arm supports should be adjustable for different workers' needs.



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## Glare and Lighting

Workstations should be positioned to avoid direct or indirect glare from overhead lights, and monitors and computer screens should be sufficiently bright to avoid eye strain. Eye strain sometimes is indicated by squinting and problems with focusing, for example, Workstations should be positioned so that users have a straight-ahead line of vision. Ideally, work surfaces should have a matte finish to reduce glare.

### Attached Forms

Computer Workstation Checklist	4 (r)
Potential Health and Safety Audit Form	4 (i)
Employee Incident Form	4 (f)
Job Demand Analysis-MSD Risk Factor Identification	4 (s)