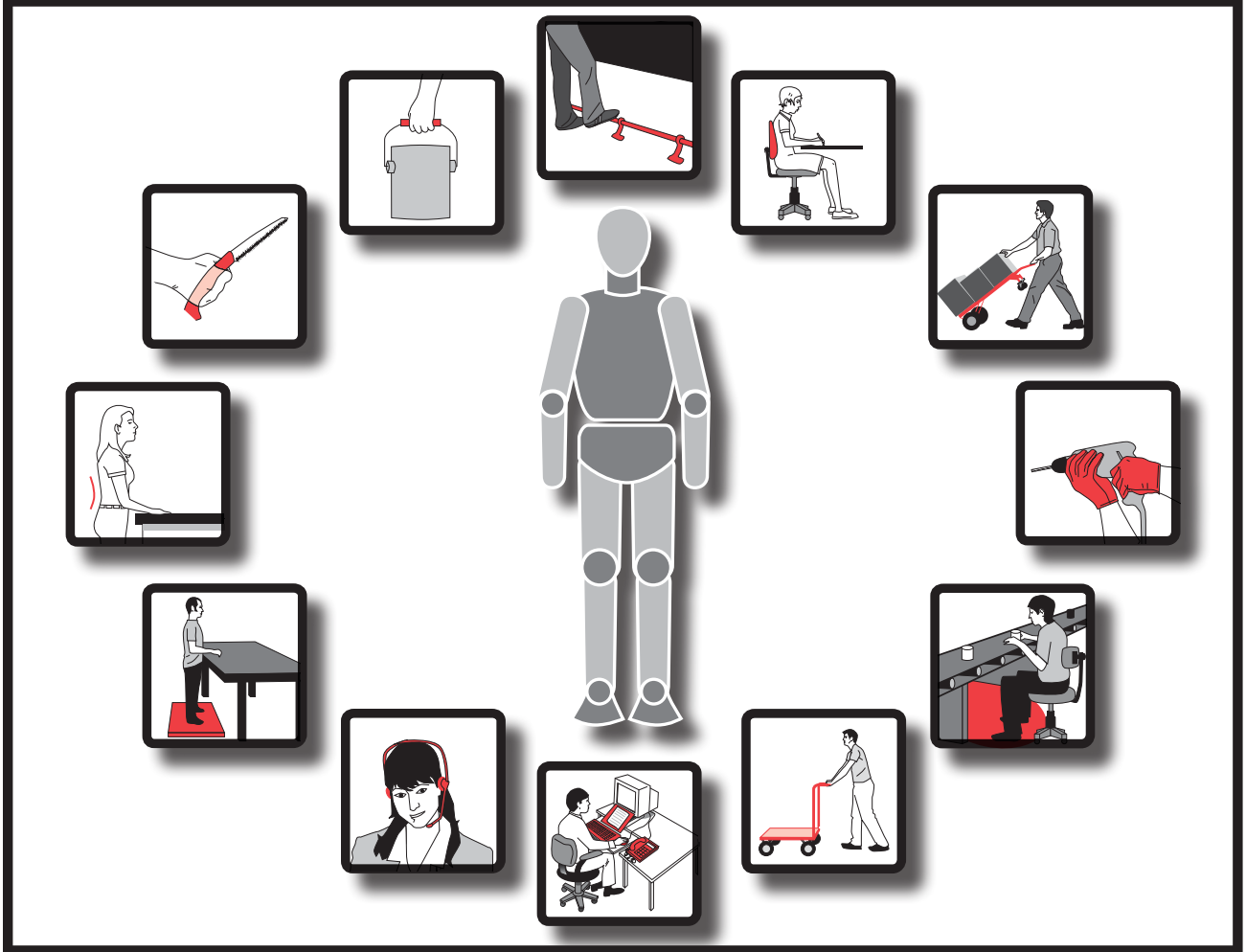
Workplace Job Accommodations

Solutions for Effective Return to Work



MFL Occupational Health Centre

SAFE WORK

SAFE
SPOT THE HAZARD
ASSESS THE RISK
FIND A SAFER WAY
EVERYDAY

Workplace Job Accommodations

Solutions for Effective Return to Work

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WCB
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Board of Manitoba

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Disclaimer

The material contained in this resource guide is for information and reference purposes only and not intended as legal or professional advice. The adoption and/or use of the information, and/or practices described in this resource guide may not meet the needs, requirements or obligations of individual workplaces or individual return to work cases.

Workplace Job Accommodations

Solutions for Effective Return to Work

Effective job accommodations for return to work programs include input from workers, the workplace, and health care professionals.

The following job accommodation examples are based on the work of the Occupational Health Centre's Quality of Life of Workers in a Return to Work project. This project studied the quality of life of workers with musculoskeletal injuries in a return to work program and documented their specific job accommodations. For more information on this project, contact the Occupational Health Centre.

The most successful return to work cases involved making changes to the physical demands and working conditions of the worker's existing job.

Ergonomic change was the key job accommodation strategy.

There are many strategies for returning an injured worker to safe work. The following examples only focus on 'ergonomic job accommodations'. These examples helped to accommodate a wide range of injured workers. However, it was the moderate to long term musculoskeletal injuries that had the most success from the implemented changes.

This **resource guide** contains information on job accommodation principles and examples for the most common musculoskeletal injuries. It is separated into four sections:

Back Injuries

Hand Injuries

Leg Injuries

Neck and Shoulder Injuries

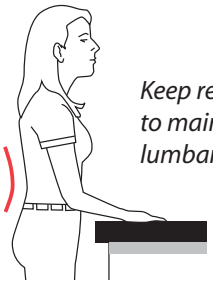
A **job accommodation worksheet**, page 8, is included to help identify solutions based on the job accommodation principles and the specific physical demands of the task. An example worksheet is included.

A **resource section** provides contact information for agencies in Manitoba that can help with the Return to Work Process and Ergonomics.

Low Back Injuries

To accommodate low back injuries, keep the following points in mind:

1) maintain the natural "lumbar" curve of the lower back,

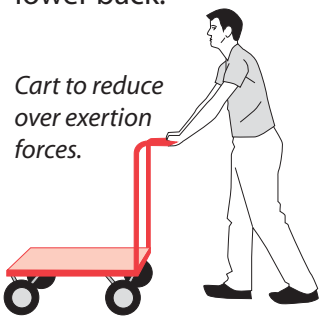


Keep reaches short to maintain the lumbar curve.

2) provide support for the lower back,

Ergonomic Chair for low back support.

3) reduce over exertion forces acting on the lower back.



Cart to reduce over exertion forces.

Job Accommodation Solutions:

WORKPLACE DEMANDS	EXAMPLES
Sitting Work	• Provide an adjustable chair with a lumbar cushion to support the lower back. • Keep objects within a short reach to avoid bending forward.
Standing Work	• Provide height adjustable equipment (work table or platform) with a footrest to reduce low back stress. • Provide a foot rail to allow workers to change posture.
Vibrations or Jarring Motions	• Provide a lumbar support device or anti-vibration padding to reduce mechanical stress to the lower back. • Eliminate vibration or jarring motion with engineering fixes.
Reaching or Stooping	• Keep objects within a short reach. This will reduce stooping and keep strain off the lower back while leaning forward. • Remove barriers, design workstations with leg clearance or purchase equipment that allows the worker to reduce reaches. • Purchase worktable height adjustable cylinders to reduce stooping. • Provide tool extenders to reduce stooping and reaching.

Low Back Injuries

Job Accommodation Solutions Continued:

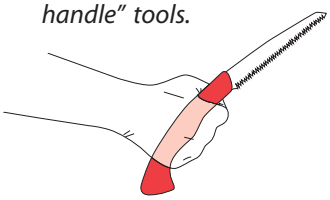
WORKPLACE DEMANDS	EXAMPLES
Manual Material Handling (MMH) **Lifting, Lowering, Pushing, Pulling and Carrying Tasks**	• Provide equipment (hoists, lifting devices, articulating arms) to place objects at waist height or to eliminate handling of the object. • Reduce the weight of the object by decreasing its size, the amount of material in the container or the container (tare) weight. • Push objects instead of pulling. Use low friction materials to reduce exertion forces. • Redesign the workstation or object to bring it closer to the body when lifting, lowering, pushing, pulling or carrying. • Eliminate obstructions that prevent the object from being lifted with good posture. • Provide platforms, risers, bedsteads or stacked pallets to position objects from knee to chest height. • Use gravity (rollers, conveyors, chutes, vertical feed lines) to improve manual material handling. • Provide handles or hand holes to facilitate gripping of the object. • Reduce carrying distances by making changes to the layout or by using powered or mechanized equipment. • Reduce obstacles that may lead to slip and trip falls or awkward carrying. • Use carts that are designed for the task, i.e., long straight aisles, frequent turns, long heavy loads and floor type (concrete vs linoleum). • Consider making workstation layout changes or provide adequate space to reduce twisting. • Visual line of sight is important for proper lifting. Improve lighting, reduce glare and shadows and remove visual obstacles. • Manual material handling increases body heat. Use layered and vented clothing to control body heat. • Working in the cold affects the body. Wear adequate clothing to keep the hands and body warm. • Purchase or design jigs or fixtures to reduce static holding of objects, allow for changes in posture and to reduce exertion forces.

Hand Injuries

To accommodate hand injuries, keep the following points in mind:

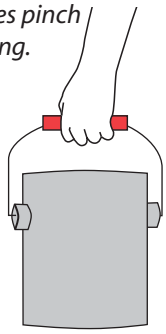
1) Minimize bending of the wrists,

Specialized "curved handle" tools.



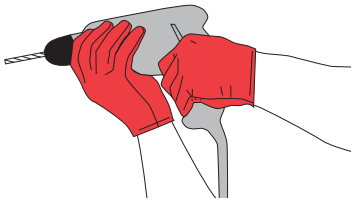
2) Avoid pinch gripping with forceful exertions,

A thicker handle reduces pinch gripping.



3) Minimize vibration, and cold,

4) Avoid mechanical pressure (hard or sharp objects putting pressure on the wrists, palm or fingers).



Job Accomodation Solutions:

WORKPLACE DEMANDS	EXAMPLES
Excessive Wrist Bending and Repetitive Wrist Motions	• Provide ergonomic tools or changes to the layout of workstations or equipment to improve wrist postures. • Design the task to use different body parts and allow for larger muscles to perform the task • Provide tools, jigs or fixtures to reduce grip forces and repetitive motions.
Forceful Exertions	• Provide more efficient tools or other modifications to reduce grip forces and minimize pinch gripping. • Increase the size of tool handles to reduce pinch gripping.
Vibration and Cold	• Provide proper gloves to reduce vibration and cold. • Design the task to reduce vibration and exposure to cold.
Mechanical Pressure	• Provide gloves with padding to reduce mechanical pressure to the hands, round the edges of workstations or pad the tool or equipment. • Increase the size of the tool or object to eliminate mechanical pressure on the fingers and hands.

Lower Leg Injuries

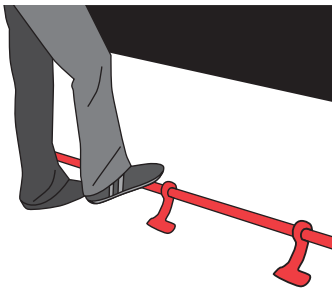
To accommodate lower leg injuries, keep the following points in mind:

1) Improve mobility and reduce fatigue from lifting, lowering, pushing, pulling, and carrying,

2) Reduce static postures when sitting and/or standing.

Adequate leg clearance and space.

Provide support with a footrest or rail.



Job Accommodation Solutions:

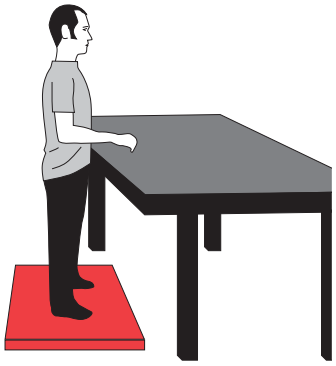
WORKPLACE DEMANDS	EXAMPLES
Manual Material Handling (MMH) and Mobility Issues (kneeling, squatting, leg clearance, etc.)	• Many of the suggestions listed for Low Back Injuries under Manual Material Handling, page 3, can be used for Leg Injuries. • Change the placement of tools and equipment to improve mobility. • Provide adequate clearances and space for the feet, knees and thighs. This will allow for posture changes and reduce fatigue. • Are the thighs or legs leaning or resting against a sharp edge on tools or equipment. Round the edge or provide padding to reduce mechanical pressure on the legs.
Sitting	• Provide an ergonomic chair or sit/stand stool with a footrest. • Design the workstation to alternate between sitting and standing. • For driving on rough surfaces or exposure to whole body vibration, isolate the seat from the vehicle, maintain the floor surface, dampen the vibration or provide an ergonomic seat.
Standing	• Provide a footrest or rail so the legs can be supported and workers can change posture. • Provide anti-fatigue matting. • Provide adequate floor space to change foot positions.

Neck and Shoulder Injuries

To accommodate neck and shoulder injuries, keep the following points in mind:

1) Keep objects within short reaches while keeping the elbows close to the body,

2) Eliminate shoulder shrugging (i.e., proper working height),



3) Reducing neck bending, twisting and vision issues.

A headset eliminates neck bending and twisting.

Job Accommodation Solutions:

WORKPLACE DEMANDS	EXAMPLES
Far Reaches	• Design racking or conveyors to reduce reaching. Examples include gravity infeed racking, providing space between pallets to get closer to an object and adjustable 'snake' conveyors. • Keep reaches to the 2 o'clock and 10 o'clock position and within a 20-24 inch reach (50-60cm). This will keep the elbows close to the body and reduce shoulder strain. • Eliminate any reaching behind the body.
Improper Working Height	• Provide height adjustable platforms or work benches to reduce shoulder shrugging. • Change the location or orientation of work or provide jigs or fixtures to improve shoulder postures. • Modify tool handles to keep elbows close to the body.
Neck Bending, Twisting and Vision Issues	• Provide a headset or document holder to reduce neck bending. • Improve lighting to reduce shadows and glare. • Provide adjustable worktables or fixtures to improve viewing angles and neck posture. • Tilt the work surface to reduce neck bending.

Neck and Shoulder Injuries

Job Accommodation Solutions Continued:

WORKPLACE DEMANDS	EXAMPLES
Forceful Exertions	• Change the position of the product or tool to allow for good shoulder posture – keep the elbows close to the body. • Use power tools with torque reduction arms or automatic shut offs to reduce forceful exertions. • Mechanize tasks to reduce forceful exertions – examples include automatic bottle openers, labelers, and tilting /swivel workstations. • Proper fitting gloves can reduce grip forces. This in turn reduces shoulder muscle forces. • Improved lighting (more light, reduced glare and shadows) can improve neck and shoulder postures and reduce forceful exertions. • Provide armrest supports for workstations. • Provide flexible arm clamps to adjust small tools or fixtures into better positions. • Position equipment displays to reduce neck bending, twisting, and eye strain.
Manual Material Handling (MMH) **Lifting, Lowering, Pushing, Pulling and Carrying Tasks**	• Many of the suggestions listed for Low Back Injuries under Manual Material Handling, page 3, can be used for Shoulder Injuries. • Keep objects below shoulder height. • Design cart handles so the elbows can be kept close to the body. • Design cart handles that can be adjusted vertically or long handles so workers can place their hands in the most comfortable position. • Provide handles to objects to improve gripping posture. • Dispense material into smaller containers for easier pouring. • Eliminate any motion that includes pushing or pulling behind the body. • Reduce the amount of time to hold onto an object by using mechanized equipment, jigs or fixtures or tool balancers.

Job Accommodations and Type of Physical Demand Restriction Worksheet

Department: _____ Date: _____

Task: _____ Shift: _____ Analyst: _____

Job Accommodation Worksheet

PHYSICAL DEMANDS	AFFECTED BODY AREAS AND JOB RESTRICTIONS/ CAPABILITIES	TOOLS, EQUIPMENT, LAYOUT OR OTHER SOLUTION IDEAS
Manual Material Handling: Lifting, Lowering, Pushing, Pulling, Carrying		
Mobility: Standing, Sitting, Walking, Climbing, Balancing, Crawling, Crouching, Kneeling		
Posture: Stooping, Bending, Reaching, Raising Arms Above Shoulders, Use of Both Hands (or either one)		
Other Demands: Working in Heat/Cold, Use of Heavy Equipment, Vibration, Noise, Chemical Exposure, Allergies, Moving Machinery, Working at Heights		
Comments		

Job Accommodations and Type of Physical Demand Restriction Worksheet

Department: _____ Date: _____

Task: _____ Shift: _____ Analyst: _____

EXAMPLE

Job Accommodation Worksheet

PHYSICAL DEMANDS	AFFECTED BODY AREAS AND JOB RESTRICTIONS/ CAPABILITIES	TOOLS, EQUIPMENT, LAYOUT OR OTHER SOLUTION IDEAS
Manual Material Handling: Lifting, Lowering, Pushing, Pulling, Carrying	– Upper and Lower Back, Right Leg – Capable of lifting up to 10 lbs infrequently.	– Provide a lifting device to reduce the weight. – Provide a conveyor to eliminate lifting and carrying.
Mobility: Standing, Sitting, Walking, Climbing, Balancing, Crawling, Crouching, Kneeling	– Upper and Lower Back, Right Leg. – Capable of standing and sitting but limited to other demands such as walking and climbing.	– Provide an adjustable chair and or height adjustable worktable. – Provide a footrest while standing and sitting. Change the layout to reduce walking.
Posture: Stooping, Bending, Reaching, Raising Arms Above Shoulders, Use of Both Hands (or either one)	– Upper and Lower Back, Right Leg. – Not capable of stooping or bending frequently or static postures.	– Provide adjustable equipment and alternatives to standing, sitting or stooping. – Also, consider reducing reaches to eliminate bending.
Other Demands: Working in Heat/Cold, Use of Heavy Equipment, Vibration, Noise, Chemical Exposure, Allergies, Moving Machinery, Working at Heights	– Upper and Lower Back, Right Leg. – Avoid working in the cold and use of heavy machinery.	– Provide cold weather gear if required. – Is working with heavy equipment an essential duty of the job?
Comments	– This example is not designed for a specific task or injury. – It allows for ideas to be documented while considering the capabilities of the injured worker while focusing on ergonomic changes.	

Return to Work and Job Accommodation Resources

WCB Workers Compensation Board of Manitoba

333 Broadway
Winnipeg, MB, R3C 4W3
Phone (204) 954-4922,
Toll Free 1-800-362-3340
www.wcb.mb.ca.

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Ergonomic Resources available for downloading from the Occupational Health Centre: www.mflohc.mb.ca