# **Ergonomics of Fall Yard/ Garden Chores: Preparation** for Winter



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Yard waste cleanup; fall gardening tasks; gutter/eavestrough cleanup; and the storage of summer furniture, work, and leisure equipment requires substantial physical effort. Manual material handling activities (lifting, lowering, carrying, pushing, and pulling) may lead to the development of musculoskeletal disorders (MSDs).

## **Manual Material Handling**

### 1. Plan

- Organize tasks, equipment required, storage options, help required
- Clothing lightweight, closed toed shoes or boots, Personal Protective Equipment (PPE) - safety glasses, gloves, etc.
- Physical Preparation warmup and stretch

## 2. Lifting/lowering and carrying

- **Test weight** lift within personal limits; use lifting aid or partner; and use correct lifting techniques (BACK)
- Ensure adequate grip and stable base

**B** ACK STRAIGHT **AVOID TWISTING C**LOSE TO BODY **K**EEP SMOOTH





## 3. Push/pull

- Push rather than pull
- Use correct equipment (wheelbarrows, buggies, wagons)
- Ensure equipment is properly maintained (lubrication, tire inflation, handles, etc.)
- Ensure load is stable, evenly distributed, and appropriate weight

## 4. Climbing - ladder, scaffolding, etc.

- Ensure it is in good repair with no loose hinges, rungs, or screws
- Place on a firm, level surface, and be sure it is erected
- Always ascend and descend facing toward the ladder or scaffolding
- Abide by manufactures recommended work heights
- Always work with a partner for additional stability and safety

## **Raking and yard waste**

### Select the right rake:

- Handle length that allows the user to stand upright
- Rake head that is correct for material to be moved: bow or fork head for garden, thatch, or heavier material (dirt, gravel, etc.); fan head for leaves or light
- Correct rake head width wider heads require increased forces
- Correct rake weight and construction steel/metal rakes are heavier than plastic or fiberglass







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## Raking technique

- Reach arms directly forward ahead of the leaves, etc. and pull back - avoid twisting
- Step to the side to move onto a new debris pile avoid twisting
- Use "scissors" stance: one foot forward and one foot back for a few minutes, then reverse position
- When picking up the debris use correct lifting techniques
- Make smaller piles to decrease weight and lateral reach requirements
- Take regular breaks or change tasks frequently
- Consider using a leaf blower or a mulching lawn mower to negate the need to rake at all.

## **Gardening, harvesting, flower beds**

- Kneel or use a small chair/stool to decrease bending or stooping when in one spot for extended periods
- Align torso directly with task to avoid twisting
- Alternate hands to reduce strain and prevent imbalances
- Utilize appropriate tools or aids to assist gardening shovels, hoes, etc.
- Take regular breaks or change tasks frequently





Use of an adjustable garden kneeler/seat

## **Cleaning gutters and eavestrough**

- Always follow all recommended safety guidelines set out for ladder use. <u>More info here.</u>
- Always perform this with a partner one person holds ladder while upright and helps with its relocation
- Move ladder frequently to avoid overreaching always keep body centred on the rungs of the ladder, do not lean to the side or reach more than an elbows distance away
- Remove small amounts of debris at one time use a rope and small bucket to lower waste
- Use a hose or pressure washer to push waste towards one end to decrease the number of times the ladder needs to be relocated

# Storage: Lawn/garden equipment; Patio/lawn furniture; etc.

- Use correct lifting techniques; have a partner or a lifting aid to help move larger, heavier items
- Store at appropriate height (preferably chest level) to avoid excess bending, stooping, or reaching overhead
- Place items in a different location than winter equipment to avoid moving them again when requiring winter tools
- Organize and plan when moving and storing items