



# Manual handling in the vegetable industry



## Why is manual handling an issue?

WorkSafe Victoria reported receiving 266 claims from the Vegetable growing industry for the period 2004-09, with an average claim cost of \$68,000. Over half these claims were for injuries associated with hazardous manual handling.

In the vegetable growing industry, many activities such as packing, picking or planting can involve **hazardous manual tasks** comprising the following actions:

- Repetitive or sustained force
- High or sudden force
- Repetitive movement
- Sustained or awkward posture
- Exposure to vibration

Undertaking vegetable packing, picking or planting involving hazardous manual handling can lead to musculoskeletal disorders such as:

- Sprains and strains of muscles, ligaments and tendons
- Back injuries, including damage to the muscles, tendons, ligaments, spinal discs, nerves, joints and bones
- Joint and bone injuries or degeneration, including injuries to the shoulder, elbow, wrist, hip, knee, ankle, hands and feet
- Nerve injuries or compression, e.g. carpal tunnel syndrome
- Soft-tissue hernias, and
- Chronic pain

Injuries can also occur due to a combination of these conditions.

Other factors common in vegetable packing, picking and planting that can increase the risk of musculoskeletal disorders include working:

- In cold and hot weather
- On wet and slippery floors
- On uneven surfaces or terrain
- In cramped conditions
- On moving trailers
- In noisy and poorly lit environments

## What is the solution?

The risk of musculoskeletal disorders can be minimised by undertaking the following steps:

### Step 1 – find it

Identify the activities that involve hazardous manual tasks. Review available information, such as records of workplace injuries; look for trends, and observe manual tasks. The muscular effort required to lift, lower or carry a load depends on more than just the weight of the object. It is also determined by the:

- Posture
- Movement
- Force
- Vibration; and

the duration and frequency of the task and environmental conditions.

### Step 2 – assess the risks

You should carry out a risk assessment for any manual tasks that you have identified as being hazardous, unless the risk is well-known and you know how to control it.



A risk assessment can help you determine:

- Which postures, movements and forces of the task pose a risk
- Where during the task they pose a risk
- Why they are occurring, and
- What needs to be fixed

The Code of Practice for Manual handling can provide guidance on undertaking risk assessments.

Consult with your workers and look for improvisations they may have made to avoid discomfort, such as using flattened cartons to stand on.

Team handling to manual handle a load is only an interim control and if it is used on a regular basis then redesigning to allow for use of mechanical equipment or elimination of the need to lift should be considered.

### Step 3 – fix it

Where a hazardous manual task is identified, seek to eliminate the task, and if that is not possible, minimise the risk of a worker being affected by a musculoskeletal disorder by:

- Changing the design or layout of work areas or
- Changing the systems of work used or
- Changing the nature, size, weight or number of things involved or
- Providing mechanical aids or
- Changing the work environment

A combination of the above measures often provides the best solution.

**Health and safety solutions have been developed in conjunction with the vegetable industry that targets known muscular skeletal disorders occurring as a result of hazardous manual handling in vegetable production.**

The following health and safety solutions have been produced as guidance for vegetable producers.

1. Handling trays of vegetable seedlings when transplanting
2. Vegetable transplanting
3. Manual harvesting of vegetables
4. Bulk bins and large crates – packing vegetables in the field
5. Bulk bins and large crates – packing and unpacking vegetables in the packing shed
6. Inspecting, sorting and grading vegetables at production lines
7. Packing vegetables from production lines
8. Lifting and moving boxes or crates of vegetables in the packing shed
9. Stacking boxes of vegetables on pallets
10. Manual handling of vegetable cartons and crates

### Managing Solutions (Controls)

Control measures that have been implemented should be reviewed, and if necessary revised to make sure that they work as planned, and to ensure that they do not pose a risk to health and safety.

Training and instruction in the type of control measures implemented should be provided. This training should be incorporated in an overall induction program.

Liaising with the supply chain may be necessary if the solutions planned are likely to impact on that supply chain.

### Further Information

Solutions can be downloaded from [www.vgavic.org.au](http://www.vgavic.org.au)

Manual Handling Code of Practice at [www.worksafe.vic.gov.au](http://www.worksafe.vic.gov.au)