

This guide provides help in selecting appropriate risk controls for manual handling tasks. Use this guide in conjunction with the *Manual Handling Risk Assessment Form* and the procedure *Manual Handling and Ergonomics Risk Management (UOM 337)*. For more information, refer to <http://safety.unimelb.edu.au/tools/risk/> or contact your local EHS contact.

CONTROL TYPE	HOW TO CONTROL RISK	CONTROL OPTIONS TO BE CONSIDERED
<b>E</b> <b><u>E</u>limination</b>	Eliminate the activity	Eliminate the manual handling activity.
<b>AW</b> <b><u>A</u>lter the <u>W</u>orkplace</b>	Workplace layout	Eliminate or reduce bending, twisting, reaching, pushing, pulling, holding and carrying forces by: <ul style="list-style-type: none"> <li>• locating equipment, controls, materials and tools in front of employee, below chest height.</li> </ul>
	Workstation design	Change the work heights, or introduce adjustable height surfaces or angled surfaces. Ensure clearance for legs and feet and that the operator can get close the task. Supply a stool, footrest or step stool.
	Working position	Allow for range of movements and adjustable environment and equipment by: <ul style="list-style-type: none"> <li>• allowing for movement between sitting and standing, and for turning and moving;</li> <li>• lowering or raising the employee pit or platform if appropriate.</li> </ul> Ensure work is positioned so hands are working just below elbow height with elbows close to body and shoulders relaxed. Ensure suitable handles on tools and objects to facilitate strong and comfortable hand positions and neutral wrist postures.
<b>AE</b> <b><u>A</u>lter the <u>E</u>nvironmental conditions</b>	Vibration	Dampen vibration. Isolate vibration. Ensure regular maintenance.
	Temperature	Relocate work. Regulate temperature and airflow where possible. Provide Personal Protective Equipment (PPE). Control with clothing.
	Lighting	Avoid glare by: <ul style="list-style-type: none"> <li>• appropriate positioning of lighting or workstation;</li> <li>• providing task lighting or diffusers.</li> </ul> Ensure surfaces are matt and non reflective.

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	Housekeeping	<p>Ensure regular housekeeping is undertaken to reduce clutter and remove obstructions (trip/slip hazards) from walkways.</p> <p>Ensure storage is organized so heavier or frequently used items are located between chest and mid thigh.</p> <p>Ensure floor surfaces are level, clean, non slip and anti fatigue mats as required.</p>									
<b>ASW</b> <u>Alter the Systems of Work</u>	Job design	<p><b>Working position:</b> determine whether activity is best suited to sitting or standing. Consider:</p> <ul style="list-style-type: none"> <li>• does it involve small forces, light work or static controlled movements close to body? For example, pipetting is better suited to sitting; or</li> <li>• does it involve long reaching movements, handling large or bulky objects or loads, and dynamic postures? For example, library service loans desk work is better suited to standing.</li> </ul> <p>Ensure workflow is designed efficiently to eliminate unnecessary steps or human effort.</p> <p><b>Team handling:</b> team handling should be planned. Teams should be trained together with participants of a similar size and strength.</p>									
	Pace and flow of work	<p>Set reasonable work rates and deadlines.</p> <p>Determine appropriate work flow. For example, adjust conveyor belt to comfortable speed for operators</p> <p>Consider job rotation: For example reduce exposure time, rotate postures, actions and movements.</p>									
	Shift length, breaks	<p>Ensure adequate opportunity for brief rest breaks (micro pauses). For example, scheduled rest breaks that allow enough time, within the shift and between shifts, for rest and recovery.</p>									
<b>CO</b> <u>Change the Objects used in the task</u>	Modify the load being handled	<p>Consider the shape, size and weight of the objects handled.</p> <p>Minimise weight of object by reducing packing size.</p> <p>Maximise ease of grip and ability to handle the object close to the body.</p> <p>Ensure provision for appropriate handles and hand holds to facilitate control.</p>									
	Modify tools & equipment	<p>Minimise awkward postures of the hand, wrist and arm.</p> <p>Minimise force requirements to operate tools. For example:</p> <ul style="list-style-type: none"> <li>• use balancers</li> <li>• keep equipment well maintained</li> </ul>									
	Provide mechanical aids	<p>Mechanical aids or materials handling devices often take all or part of the weight of the object and reduce the force required to move the object. Examples include:</p> <table border="0"> <tr> <td>• hoists</td> <td>• wheelbarrows</td> </tr> <tr> <td>• trolleys (electric or manual)</td> <td>• long handled reaching equipment</td> </tr> <tr> <td>• dollies</td> <td>• slings and straps</td> </tr> <tr> <td>• conveyors</td> <td>• slide sheets</td> </tr> <tr> <td>• wheel or castors</td> <td>• harnesses</td> </tr> </table> <p>Trial equipment where possible to ensure that it is effective and does not introduce new risks.</p>	• hoists	• wheelbarrows	• trolleys (electric or manual)	• long handled reaching equipment	• dollies	• slings and straps	• conveyors	• slide sheets	• wheel or castors
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<b>A</b> <b>Administrative controls</b>	Information, training or instruction in manual handling techniques; Standard Operating Procedures (SOP)	Manual handling training that includes: <ul style="list-style-type: none"> <li>• recognising manual handling hazards</li> <li>• reducing risks,</li> <li>• instructing in optimal and protective postures</li> </ul> Use safety signage and information about weights on loads. Develop SOP, ensuring staff are briefed and have ready access. Determine the level of understanding and experience of staff provide in order to provide appropriate supervision