Lifting Guidelines

This guide is meant to provide you with a rough estimate of what can be safely lifted for the general working population under ideal conditions.

Please note that additional factors such as shape of object, footing, personal health, etc. can impact that amount of weight that can be safely lifted. Nonetheless, this guide can be used to help you determine a maximum safe weight: implement controls if a task requires lifting greater than what is specified below.

Please contact ergonomics.info@ubc.ca for assistance with your assessment.

Under Ideal Conditions:

<table>
<thead>
<tr>
<th>Height (inches)</th>
<th>0</th>
<th>4</th>
<th>16</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 lbs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>35 lbs</td>
<td>0</td>
<td>15</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>50 lbs *</td>
<td>0</td>
<td>35</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>40 lbs</td>
<td>0</td>
<td>30</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>30 lbs</td>
<td>0</td>
<td>20</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

**Ideal Conditions:**
- Good grip with both hands
- No twisting or bending
- Minimum of 5 minutes between each lift
- Lifting over no more than 1 hour of the day
- Ambient temperature 19° to 26°

**Personal Factors:**
Not everyone can lift this weight. But no one should be required to lift above this weight

**Maximum Weight**
NIOSH lists 50lbs as the max weight. Oregon OHSA calculator lists 70lbs as the max weight. UBC’s Ergonomics Programs recommends **50lbs** as the max weight.

Weight & diagram from Oregon OHSA calculator
Location, Location, Location:
An important part of safe lifting is planning ahead—store heavier in your strongest lifting zone.

**Strongest Lifting Zone:**
Between mid-thigh and waist height

**Store only lighter items above shoulder level**

**Store only lighter items below knee level**

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Engage your Abs:
When you contract your transverse abs (deep stomach muscles) you should feel tension under your fingertips and not a contraction that pushes your fingers out.

Safe Lifting Technique:

**Preparation is critical:**
✓ Can you use a dolly or cart?
✓ Clear path: remove obstacles so that you can get in close
✓ Test load
✓ Get help and communicate clearly if working in a team

**Lifting technique**
✓ Use a wide stance with your feet slightly wider than hip width distance
✓ Get in close
✓ Bend your knees, even just slightly
✓ Get a good grip
✓ Keep your neck neutral as you lift (avoid lifting with your neck flexed down)
✓ Engage abs and breathe out as you lift

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