Lifting/Carrying

Safe Lifting Mechanics:

1. Stand close with your feet shoulder width apart and face the object
2. Bend your knees, keep your back straight and look forward
3. Lift with your legs
4. Keep items close to your body and at waist height

Safe Lifting Best Practices:

- Plan the lift and find the best your route
- Ask a coworker for help
- Use a mechanical aid as much as possible
- Warm up and stretch prior to lifting
- Move your feet to reduce trunk rotation. Keep your “nose between your toes”

Recommended Lifting Limits: ACGIH TLV for Moderately Frequent Lifting*

> 2 hours/day with > 12 and ≤ 30 lifts/hour

<table>
<thead>
<tr>
<th>Vertical Height of Hands</th>
<th>Horizontal Distance of Hands from Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder Area</td>
<td>12” – 24”</td>
</tr>
<tr>
<td></td>
<td>24” – 32”</td>
</tr>
<tr>
<td></td>
<td>10 lbs.</td>
</tr>
<tr>
<td></td>
<td>30 lbs.</td>
</tr>
<tr>
<td></td>
<td>No known safe limit</td>
</tr>
<tr>
<td>Torso Area</td>
<td>60 lbs.</td>
</tr>
<tr>
<td></td>
<td>30 lbs.</td>
</tr>
<tr>
<td></td>
<td>15 lbs.</td>
</tr>
<tr>
<td>Knee Area</td>
<td>20 lbs.</td>
</tr>
<tr>
<td></td>
<td>25 lbs.</td>
</tr>
<tr>
<td></td>
<td>35 lbs.</td>
</tr>
<tr>
<td></td>
<td>No known safe limit</td>
</tr>
<tr>
<td>Ankle Area</td>
<td>&gt;12”</td>
</tr>
</tbody>
</table>

*American Conference of Governmental Industrial Hygienists Threshold Value Limits for Lifting, 2007
Prior to Starting a New Job:

Plan and Select the Correct Tool
- Review the job tasks as a group prior to starting a new job
- Determine which tools/equipment are needed to safely complete the task
- Select mechanical tools over manual tools as much as possible
- Prepare all the tools to complete the task to bring them with you to the field

Discuss Best Practices as a Group
- Alternate tasks between the left and right sides of your body
- When possible, complete heavy/high risk jobs in the morning
- Work at a comfortable pace
- Take a 1 - 2 minute microbreak to stretch for every 20 minutes of continuous work that requires awkward postures or repetitive lifting

Flex & Stretch
- Warm up and stretch in the morning, after lunch, and prior to any task that requires repetitive lifting

Handle Materials and Lift Safely Following the Identified Precautions and Best Practices

Special Considerations:

Digging
- Use digging bar or roto-hammer to break up the soil
- Rotate digging tasks with your coworkers

Wheelbarrow
- Don't overfill it. Be mindful of the weight of the load.
- Use Bobcat or tractor as much as possible instead of using wheelbarrows. Follow proper lifting techniques.

Kneeling
- Kneel directly in front of your work
- Avoid twisting and overreaching
- Use knee pads / kneeling mats when appropriate

Do you have additional ideas or concerns? Contact your supervisor or SU EH&S at 723-0448.