

Heavy, Frequent, or Awkward Lifting Strategies

- Use mechanical assists to lift/lower loads - such as hoists, pallet trucks, pump trucks, ladder hoists, gin poles, daisy chains, cranes, or chain falls.
- Use lifting devices designed for specific tasks, e.g. lifting/moving people, lifting/moving animals.
- Move objects as close to the body as possible before lifting them – use turntables to bring loads close.
- Ensure there are no obstacles between the worker and the load being lifted.
- Provide height-adjustable pallet trucks/scissor lifts to keep loads off the floor and so that loads can be handled with the hands above knee height.
- Organize the starting and ending location of the lifts to limit the overall vertical travel distance a load has to be lifted.
- Avoid lifts below knuckle level and above shoulder level – limit use of high and low shelves.
- Avoid lifting loads that are heavier than four kg when seated – stand and use larger, stronger muscles.
- Improve grips/handles on objects being lifted.
- Split the overall weight of a load into smaller loads.
- Avoid uneven, unbalanced loads.
- Use gravity as an assist whenever possible (lower rather than lift).
- Use carts, motorized buggies, conveyors, gravity feed rollers to transport loads rather than carrying them.
- Provide tools/devices to help with carrying tasks - carrying handles, extension handles.
- Train workers to assess all material handling tasks and to ensure that the path is clear of obstructions/trip hazards when carrying items.
- Do not carry objects up and down stairs if two hands are needed to hold objects. Keep one hand free to hold hand rail.
- Improve housekeeping to prevent slips, trips and falls.
- Require suppliers to include the weight on all objects/packages that are manually handled.
- Use shoulder pads when carrying loads on shoulders.

Marklin R. General Knowledge Regarding Engineering Controls in Interventions, controls and Applications in Occupational ergonomics, Marass and Karwowski (eds), CRC, 2006