Manual-Handling Myths: Safe Lifting, Lowering and Carrying in the Age of Automation Stats and Facts



FACTS

1. **Overconfidence in Technique:** Even “perfect lifting form” cannot fully protect workers when loads are too heavy, unstable, or awkward—biomechanical stress still builds dangerously.
2. **Hidden Load Instability:** Boxes, bags, bins, and materials can shift suddenly during lifting, throwing off balance and causing immediate back or shoulder strain.
3. **Awkward Grip Points:** Loads without proper handles force workers to bend wrists, twist shoulders, or grip uneven edges, increasing musculoskeletal risk.
4. **Repetitive Handling Fatigue:** Frequent lifting or carrying tasks accumulate micro-tears in muscles and tendons, even when each lift feels manageable.
5. **Underestimating Weight:** Workers often misjudge load weight, especially with compact items, leading to sudden overexertion and spinal compression.
6. **Ignoring Mechanical Aids:** Relying on manual strength instead of carts, dollies, pallet jacks, or lift-assist tools increases strain and fatigue, even in automated workplaces.

STATS

- In the US, overexertion involving lifting, lowering, or carrying caused 22% of all workplace injuries in 2020, leading to significant MSD claims despite automation reducing manual tasks by 15-20% in manufacturing.
- Manual handling accounts for over one-third of US workplace injuries annually (2020-2024), including strains and sprains, even as automation adoption rose 25% in warehouses, highlighting persistent myths about “safe” techniques.
- In Canada, 15% of accepted lost-time claims in 2020 involved exposure to harmful substances during manual tasks, but overexertion in lifting/carry rose 10% post-2020 with partial automation, per WSIB reports.
- In Canada, musculoskeletal disorders represent 30–40% of all accepted lost-time claims, with lifting and carrying among the primary triggers

(CCOHS/WSIB).
- Overexertion from lifting, lowering, and carrying caused more than 255,000 U.S. worker injuries in 2022, making it one of the top causes of lost-time incidents (BLS).