TOOLBOX TALK: Lifting & Material Handling Safety

RATTLIR Safety Series – "Strike Before It Bites"

Purpose

Improper lifting and material handling are leading causes of workplace injuries, including musculoskeletal strains, sprains, back injuries, and dropped-load incidents. This toolbox talk outlines safe lifting techniques, ergonomic principles, and material-handling best practices to reduce injury risk.

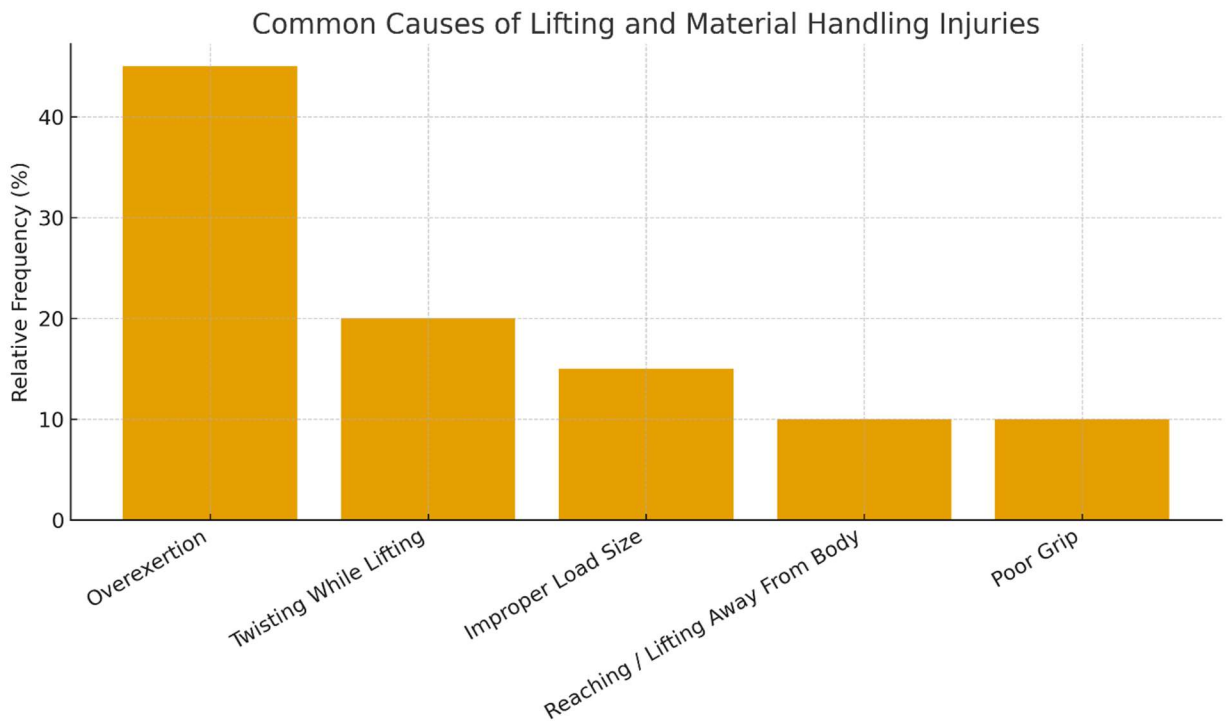

Figure 1 – Common contributing factors to lifting and material-handling injuries.

Safe Lifting Techniques

- Assess the load before lifting – check weight, shape, and stability.
- Keep the load close to your body to reduce strain.

- Bend at the knees, not the waist.
- Lift with your legs, keeping your back straight.
- Avoid twisting your torso – pivot with your feet.
- Use team lifting for awkward or heavy loads.
- Set the load down slowly and maintain control at all times.

Ergonomics & Body Positioning

- Plan the route before lifting to avoid obstacles.
- Ensure good footing and dry, stable surfaces.
- Keep your elbows tucked in and shoulders aligned.
- Use mechanical aids to avoid repetitive strain.
- Adjust work height to prevent excessive bending or reaching.

Material Handling Best Practices

- Use carts, dollies, forklifts, or hoists whenever possible.
- Stack materials securely to prevent shifting or collapse.
- Store heavy items at waist height to minimize lifting strain.
- Keep aisles clear to reduce tripping or awkward movement.
- Ensure proper hand protection and clear visibility while carrying loads.
- Communicate clearly with coworkers during team lifts.

Signs of Overexertion or Injury

- Sudden or sharp back pain.
- Tingling, numbness, or radiating pain.
- Muscle spasms or weakness.
- Inability to stand straight or reduced mobility.
- Report symptoms immediately – early treatment prevents long-term damage.

Emergency Response

- Stop work immediately if pain occurs.
- Do not attempt to 'push through' back injuries.
- Apply ice for acute strain and seek evaluation.
- For dropped loads, assess for pinch or crush injuries.
- Report all lifting-related injuries or near misses.

Discussion Questions

- Does today's task require mechanical assistance?
- Are any loads awkward, heavy, or unstable?
- Are there clear paths and good footing for material handling?

RATTLIR Takeaway

Most lifting injuries are preventable. Using proper lifting techniques, ergonomic principles, and mechanical aids ensures we strike before it bites and keep every team member healthy and strong.