

# Back Injury Prevention

Despite all of the equipment, tools, and machinery that is used in manufacturing, manual labor is still needed to get most work done. What this means is that every worker is exposed to potential injuries to their back by simply doing the normal every day tasks they often don't think about.

According to the Bureau of Labor Statistics (BLS.gov) there were more than 162,720 cases involving injuries to the back just in 2014! Tasks that can cause or aggravate an existing back injury include:

- Bending, stooping, or squatting
- Lifting materials from the floor
- Pushing heavy materials
- Kneeling for long periods of time
- Placing materials overhead
- Shoveling, twisting, or awkward body positions

Follow the recommendations in this topic to help prevent and minimize potential back injuries.



(\*1)

# Back Injury Prevention

- Housekeeping is an important part of preventing back injuries – always make sure work areas are free of clutter and possible trip hazards.



*Interior housekeeping is poor in this example – workers lifting and moving materials would be exposed to potential trip and fall hazards.*



*Interior housekeeping in this warehouse is very poor and poses potential trip, fall, and even fire hazards.*

**OSHA Standard 1910.22(a)(1)** All places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition. **OSHA Standard 1910.22(a)(2)** The floor of every workroom shall be maintained in a clean and, so far as possible, a dry condition. Where wet processes are used, drainage shall be maintained, and false floors, platforms, mats, or other dry standing places should be provided where practicable.



# Back Injury Prevention

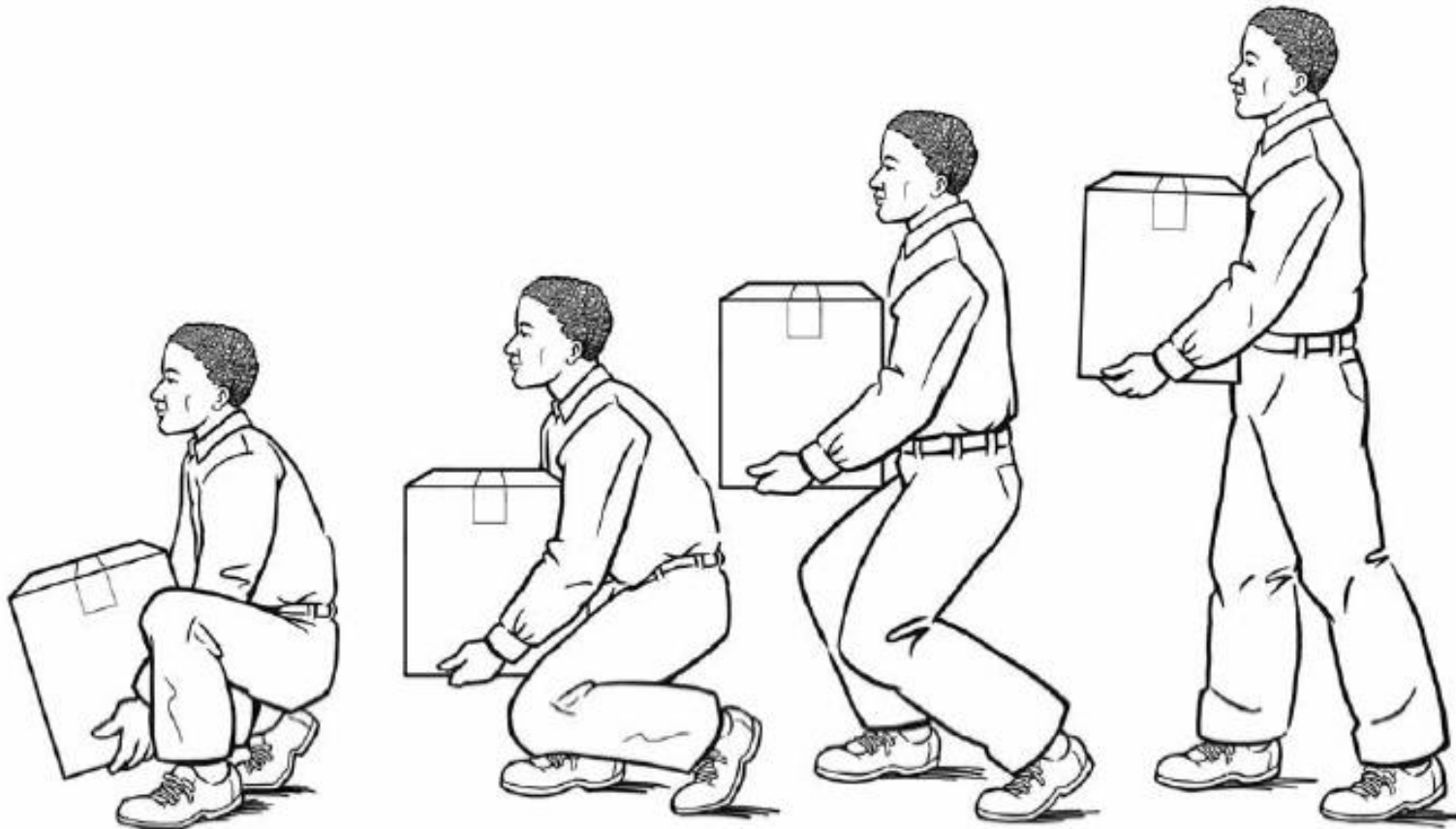


- Cut down on carrying materials whenever possible by having them delivered close to where they will be used.
- Use material handling tools like carts, dollies, pallet jacks, and forklifts if possible to limit manual lifting.



# Back Injury Prevention

- When you must lift or carry materials: 1) Keep the load as close to your body as you can. 2) Try not to twist, turn your whole body instead. 3) Lift with your legs, not your back. 4) Lift the load using a solid two-handed grip. 5) Lift and lower materials in a smooth steady way, try not to jerk the lift.



*Example of proper lifting/setting technique according to CDCs "Simple Solutions Ergonomics for Construction Workers." (\*5)*

# Back Injury Prevention



*Examples of hand carts with spring loaded lifting mechanism to reduce back strain on the handler. [www.benkoproducts.com](http://www.benkoproducts.com) (\*6)*



*Examples of a powered platform cart with lifting mechanism to raise the products to waist level and avoid bending and lifting at the back. [www.rjcox.com.au](http://www.rjcox.com.au) (\*7)*

Remember these tips to reduce back injuries:

- Housekeeping is an important part of preventing back injuries – always make sure work areas are free of clutter and possible trip hazards.
- Cut down on carrying materials whenever possible by having them delivered close to where they will be used.
- Use material handling tools like carts, dollies, pallet jacks, and forklifts if possible to limit manual lifting.
- Consider new tools and devices to eliminate the need for bending and stooping such as carts, dollies, or tools with modified or extended handles.
- When you must lift or carrying materials:
  - 1) Keep the load as close to your body as you can.
  - 2) Try not to twist, turn your whole body instead.
  - 3) Lift with your legs, not your back.
  - 4) Lift the load using a solid two-handed grip.
  - 5) Lift and lower materials in a smooth steady way, try not to jerk the lift.

## COPYRIGHT AND DISCLAIMER

This material is the copyrighted property of Weeklysafety.com, LLC. Purchase of this material from Weeklysafety.com, LLC grants the owner the right to use this material for workplace safety and education purposes only. Use of this material for any other purpose, particularly commercial use, is prohibited. This material, including the photos, may not be resold. Weeklysafety.com, LLC does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed in these materials. Photos shown in this presentation may depict situations that are not in compliance with applicable Occupational Safety and Health Administration (OSHA) safety requirements. These materials are meant for informational purposes only and it is not the intent of Weeklysafety.com, LLC to provide compliance-based training. The intent is more to address hazard awareness in the construction and related industries, and to recognize the potential hazards present in many workplaces. These materials are intended to discuss Federal Regulations only, as individual State requirements may be more stringent. Many states operate their own state OSHA and may have standards that are different from information presented in this training. It is the responsibility of the employer and its employees to comply with all pertinent OSHA safety rules and regulations in the jurisdiction in which they work.

## PHOTO ACKNOWLEDGMENTS

Unless specified below, all photos are the copyrighted property of Weeklysafety.com, LLC and may not be used in any other training materials or resold for any purpose.

- (\*1) Photo Credit - Meathead Movers. Moving boxes. <https://www.flickr.com/photos/meatheadmovers/5346369887>
- (\*2) Photo Credit – m anima. wheelbarrow. <https://www.flickr.com/photos/banky177/38266768/>
- (\*3) Photo Credit – Mark Hunter. Sealey Forklift. <https://www.flickr.com/photos/toolstop/4325153724/>
- (\*4) Photo Credit – Alameda County Community Food Bank. Dominic (...) <https://www.flickr.com/photos/accfb/5408570222/>
- (\*5) Photo Credit – CDC/NIOSH Simple Solutions Ergonomics (...) <http://www.cdc.gov/niosh/docs/2007-122/default.html>
- (\*6) Photo Credit – Product Image <http://www.benkoproducts.com/the-erg-o-cart-ergonomic-self-lifting-beverage-cart.html>
- (\*7) Photo Credit – Product Image <https://www.rjcox.com.au/product/583/18667/electric-powered-scissor-lift-trolley/>

Creative Commons License: <https://creativecommons.org/licenses/by-nd/2.0/>

For more information on this weekly safety topic, other topics that are available and the full list of FAQs please visit [www.weeklysafety.com](http://www.weeklysafety.com) or email [safety@weeklysafety.com](mailto:safety@weeklysafety.com).