

# [Back safety](https://assignbuster.com/back-safety/)

Back injuries are considered by OSHA the nation's #1 workplace safety problem Back injuries are often: -Very painful -A long term or lifetime disability -Expensive to diagnose and treat 4 If Vocation, Protect or a similar opiate is prescribed for back pain, workers should make the Medical department aware of the new prescription Back Pain Facts & Statistics According to the American Chiropractic Association: Shoulder Low back pain is the single leading cause of disability worldwide One-half of all working Americans admit to having back pain symptoms each year. Back pain is the second only to colds as the most common reason for doctor's office visits. Americans spend at least $50 billion each year on back pain? and that's Just for the more easily identified costs. Knee Ankle 2008 Total sprains and strains = 416, 620 Bureau of Labor Statistics Other upper body strains/ sprains 5 What are the common causes of back & neck injuries?

Muscle spasms? stress from overworking muscles or tension Torn/strained ligaments and muscles- severe incident caused by sudden impact or excessive lifting Bulging and herniated discs? wear and tear and aging of the discs 6 How does the back work? Your back is composed of vertebrae, discs, nerves, and muscles The spine's basic functions include -Providing support -Protecting the spinal cord, the body nerve center -Providing flexibility to allow bending and rotating Your back muscles and stomach muscles work together to keep your body stable - Strengthening one muscle helps the other Notice the natural curve to the spine What factors are associated with back disorders?

Back disorders can result from exceeding the capability of the muscles, tendons, discs or the cumulative effect of these activities: Stressful living and work activities Vibration, such as with lift truck drivers, delivery drivers, etc Poor design of Job or work station Posture Issues: - - Bad body mechanics (how one lifts, pushes, pulls or carries objects) - - Poor posture (sitting or standing) Poor footing (slippery floors, or constrained posture) Maintaining a bent posture Poor physical condition? weak stomach and back muscles Fatigue Reaching while lifting Lifting with forceful movement Repetitive lifting of awkward items, equipment, etc. Twisting while lifting Bending at the waist while lifting

Poor lifting techniques: 8 Factors Associated with Back Disorders: Incorrect vs.. Correct Posture Having incorrect posture can strain the lower back and/or shoulders. Correct standing posture requires you to: - Bend the knees slightly with your feet shoulder-width apart Hold stomach muscles in Hold shoulders back Hold head up with the chin over the chest in line with your torso 9 Factors Associated with Back Disorders: Incorrect vs.. Correct Posture, continued Having incorrect posture can strain the lower back and/or shoulders. Correct upright sitting posture requires you to: - Hold your head level or bent slightly forward, forward facing, and balanced. Keep it in-line with the torso.

Shoulders are relaxed and upper arms hang normally at the side of the body. Elbows stay in close to the body and are bent between 90 and 120 degrees. Feet are fully supported by the floor or a footrest may be used if the desk height is not adjustable. Back is fully supported with appropriate lumbar support when sitting vertical or leaning back slightly. Thighs and hips are supported by a well-papaya seat Ana generally parallel to as the hips with the feet slightly forward. 10 Correct posture for alternate seated positions Igor. Knees are tout ten same inelegant To promote better back health, OSHA suggests changing your working position frequently throughout the day in the following ways: 1 .

Make small adjustments to your chair or backrest 2. Stretch your fingers, hands, arms and torso 3. Stand up and walk around for a few minutes periodically 11 11 More Factors associated with back disorders: Bending at the Waist The back operates like a lever on a 10 to 1 ratio with the waist as a fulcrum. Bending at the waist to lift puts 10 times the amount of weight (your weight plus the weight of the dad) on your back. Avoid bending over at your waist while performing any tasks, especially while lifting The weight of the average human torso is 105 lb 12 Think about it: Which of the following exhibit good lifting techniques? Click to reveal the answers. A. B.

Bending at the waist to pick up a 20 lb toddler Bending at the knees to pick up a toddler Tying your shoes by kneeling Bending at the waist to tie your shoes 13 the answers. A. Bending at the knees to pick up a toddler Tying your shoes by kneeling 14 Even routine satellites AAA up to Tack Injury Owe to repeated strains placed on ten sack and shoulders. It's good practice to use the right lifting technique every time. Factors Associated with Back Disorders : Spine Pressure and Reaching The further you bend and the more you extend your arms, the more significant the risk of injury! 15 Reaching Examples: Reaching over several pipes to close/open valve e. Reaching/extending over running machinery. Removing solutions from top shelves overhead. Avoid extending waist outside of ladder rails while working. Ђ Unloading drums from 3rd layer in drum trailer. Vertebra e Pliable I Disc CSS Herniated Disc c To reduce reaches: Reduce dimensions of the work surface Tilt the work surface Provide cut-outs into the work surface Degree dative e Disc Disease k Sip al n Column n An issue closely related to height is difficulty with reaching. Minimize this distance 16 16 Keep loads as close to the body as possible The further away from your body you hold an object, the harder it is on your back. Work stations should be designed to minimize the distance between a lifted object and your body. Poor Improved And even more factors associated with back disorders: Poor Lifting Techniques

Lifting is the act of moving an object from one place to another - Raising, lowering or maintaining the height of an object counts as lifting Lifting can be hazardous when The object to be lifted is too heavy The object is in an awkward position The object is of an awkward or unpredictable shape Objects have to be moved repeatedly Bad lifting techniques are used 17 Beanbag / Lilting Examples: Bending over to close dome lid Moving grating or floor plate Picking up objects Tying boots Working on pumps Changing pumps Twisting motions, specially with a heavy load, place considerable stress on the spine. Improved layout is usually the best approach for eliminating this issue.

Person Twisting Person Twisting and Bending Adjustable-height " Scissors Lift" Reaching down into tubs and bins is a common source of back stress. Possible solutions include hydraulic tilters, springboards bottoms, and drown or removable sides. 18 Power deed Tile r Poor Improved Why do people lift incorrectly? Bad habits are Just hard to break Some folks have never been taught how to lift correctly and copy other people It seems faster and easier to bend from the waist Han to squat Weak knees, hips and/or legs make squatting down difficult It seems faster to twist than to step around 19 Reasons to lift with your knees and not with your back: 1 . Leg muscles are large and made for power and strength 2.

Back muscles are smaller & finer and made for balance and stability NOT for power 3. Bending at the knees PROTECTS the back Lifting Considerations: What are the 3 things to consider before lifting? 1 . Task: Does the object need to be moved, that is, can the object more easily be walked/ pushed/pulled? What needs to be moved? Where does it need to be moved? WSDL it e better to move the object in stages (e. G. Disassemble it, move it and reassemble it)? Is the object too heavy to lift? From what position do you begin the lift? What is the frequency of lifting, and is twisting involved? Is there space to move the object Is tender a clear Ellen AT passage to ten standalone spot? 2. Object: 3.

Environment: 20 Lifting Considerations, Continued Lifting Factors More weight can be safely lifted when: The load is close to the body and not too large or bulky so that elbows can be close to the torso during the lift The lift is at waist height The lift is performed in front of the odd The amount of weight that can safely be lifted is reduced when: The load is farther away from the body or is large/bulky, forcing the arms and elbows away from the torso during the lift The lift must be made from below the knees or above the shoulder The employee must twist the torso to lift and move the load.