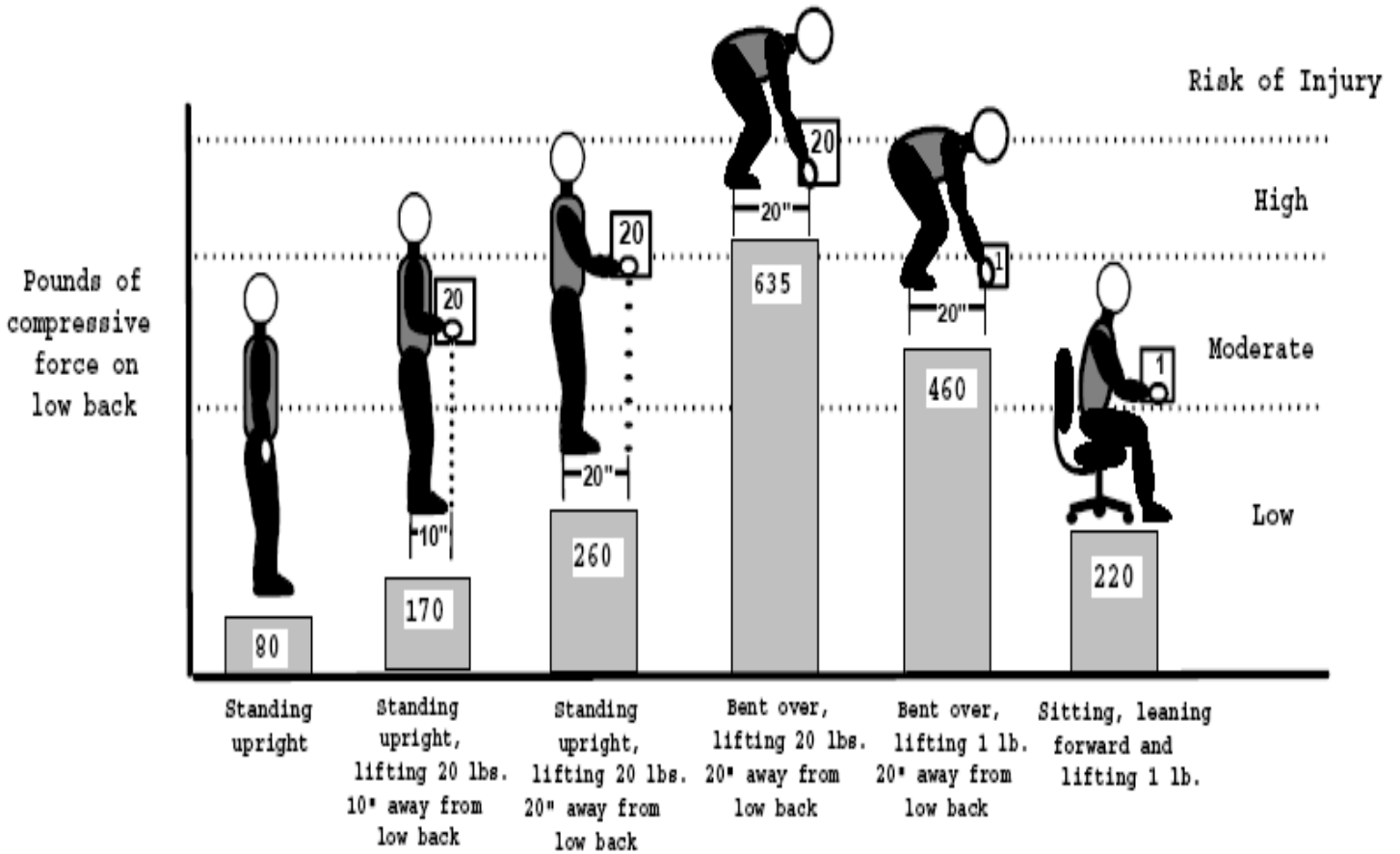


Back and Lifting Safety

The following is a list of common sense tips to keep your back in optimum condition. These guidelines should be used when lifting or moving **ANY** objects, both at work and home.

- **Get firm footing.** Keep your feet apart for a stable base and point the toes slightly outward.
- **Bend your knees.** Don't bend at the waist. Keep "leverage" in mind at all times. Don't do more work than you have to. Lifting while bent at the waist means you are not only lifting the weight of the load but also about 1/2 your own body weight.
- **Tighten stomach muscles.** Abdominal muscles support your spine when you lift, offsetting the force of the load. Train muscle groups to work together. Any type of abdominal exercise to tone muscles will also help.
- **Lift with your legs.** Let your powerful leg muscles do the work, not your weaker back muscles.
- Keep the load close. Don't hold the load away from your body. The closer it is to your spine, the less force it exerts on your back.
- **Keep your back upright.** Whether lifting or laying down the load, don't add the weight of your body to the load. Again, bend your knees.
- **Look up when lifting.** This automatically makes you straighten your back.
- **NEVER use "jerking" or twisting motions** while lifting or carrying anything, no matter how heavy it is.
- **Plan your lift or transport.** Make sure it will fit where you plan to place it so you do not have to put it down and lift it again.
- **Get help if you think you need it.** If you think you may need help, you do. Ask someone.
- **Communicate clearly** when lifting with two or more people.
- **DO NOT try to catch or save "heavy" falling objects.** Stopping a moving object requires much more force than simply lifting it and often causes injuries.

Lifting Forces on Lower Back



Force estimates based on the Michigan 2-D Static Strength Model

For more information on PSU EHS [Ergonomics Program](#), services, etc. please call (814) 865-6391 or e-mail [Mike Burke](#).