## Quick Tips

Push, Pull, and Carry Guidelines

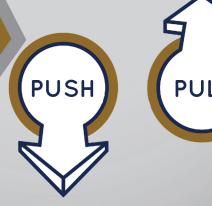


Supporting Your Investment in People



Dr. Stover Snook and Vincent Ciriello from Liberty Mutual developed a set of tables identifying the maximum acceptable weights for pushing, pulling, and carrying tasks for both males and females. The Liberty Mutual tables consider the following variables:

- Height of the hands from the floor (simplified as mid-thigh, waist, or chest level for pushing and pulling and elbows bent or elbows straight for carrying).
- Frequency (there are a limited number of frequency options and the analyst must choose the closest available frequency).
- Distance (similarly there are a limited number of distance options and the analyst must choose the closest available distance).



## The reasons we like these tables are:

- Clear goal to design a task for at least 75 percent of the population.
- They are formatted in simple, one-page layouts that are easy to use.
- A task is either acceptable or not (removes ambiguity of a yellow or in-between score).

## The two main limitations of the tables are:

- They are based on psychophysical ratings of industrial work groups, not strength or probability of injury.
- They are only used to rate one task at a time, not the cumulative effect of multiple material handling tasks.

Despite these, the tables are a good method to assess a job for ergonomic hazards associated with pushing, pulling, and carrying. Please contact us if you'd like to learn more about the Liberty Mutual Tables and their effective use as a risk assessment tool in the workplace.