There are many types of heavy equipment available for digging and earth moving which allow efficient performance of excavation work. However, whenever excavation work approaches buried utilities, or accurate finishing of an excavation is required, hand digging is necessary to accomplish the job safely or accurately. Following are guidelines for the safe use of hand digging tools:

Hand digging tools come in a wide variety of styles, but all shovels are designed for the movement of material from one location to another, and picks and digging bars are designed for breaking up hard or compacted material. The choice of the correct style for the job is important for the efficient performance of the work required. A long handled spade point or square shovel is usually the best choice for material or grading the bottom of a trench.

Excavation work. A spade point shovel is used for digging of compacted soils, whereas a square end shovel is best for moving loose soils first before shoveling.

Digging or shoveling is hard on the back; use your arms and legs as much as possible when lifting, twisting as little as possible when throwing material.

When digging compacted soils, do not jump on the shovel to achieve penetration. Keep constant downward pressure on the shovel with one foot and move the shovel back and forth until it is to depth. For highly compacted soils, use a pick or digging bar to loosen soil first before shoveling.

Ensure that you have secure footing, as level as possible, when working with digging tools.

Keep your feet, and your co-workers feet, clear of where you are digging, picking, or using a digging bar.

If working in windy conditions, it may not always be possible to work up-wind of where the material needs to be thrown, keep eye protection and dust masks on hand for use if needed.

Use a steady pace when moving a large amount of material with a shovel or using any digging tool. A smooth, regular movement will get the job done with less chance of injury or fatigue.

Dug material must be thrown sufficiently far back from the edge of an excavation to ensure that it will not fall or roll back into the excavation.

Conclusion: It is a good idea to do some back stretching exercises before throwing yourself into a large hand digging job. Keeping your abdominal muscles in shape through regular exercise will help to keep your back in shape for digging. An examination by a physician may be required before doing physically demanding work such as hand digging.

Work Site Review