Clover Safe

ENVIRONMENTAL HEALTH AND SAFETY

Clover Safe notes are intended primarily for 4-H volunteers and members nine years and older



4-H Youth Development Program

#96 SAFE USE OF RAKES AND SHOVELS



Information available from the U.S. Consumer Product Safety Commission indicates more than 28,000 people nationwide received hospital treatment during 2009 for unpowered garden tool injuries, including the use of rakes and shovels. Typical injuries were strains to the back, shoulder, and wrist and lacerations caused by stepping on a rake. Many of these injuries were avoidable and due to inattention or improper handling of the rake or shovel and could have been prevented by using the precautions given below.

Precautions for the Safe Use of Rakes and Shovels

- Select the correct shovel or rake for the job. A square-bladed shovel is used for lifting and moving loose material. A round-bladed shovel is used for digging and a garden spade for turning soil, transplanting, and edging. Fan-shaped leaf rakes are for raking leaves and other garden debris. Level-headed rakes are used for grading and smoothing soil surfaces.
- Prior to use, always inspect the rake or shovel for defects or damage (e.g., splintered, loose, bent, or cracked tool handles, loose connections, and damaged tines or blade).
- If a rake or shovel fails your inspection, inform your group leader, parent, or guardian and remove it from use.
- Wear personal protective equipment (PPE) appropriate for the task and weather conditions, including items such as a hat with brim, long-sleeved shirt, long pants, gloves, sunglasses, closedtoed shoes or boots, and sunscreen.
- Pace yourself as you rake or shovel. Take frequent breaks and consume adequate water for the gardening weather conditions.
- Use a rake or shovel that is comfortable for your height and strength. Do not use a rake or shovel that is too long or heavy for you. A garden shovel should have a length that is approximately the same as from the ground to between your elbow and chest height.
- When raking, stand upright and use the rake to pull leaves or dirt towards you.
- Bend your knees when picking up leaves for disposal.
- Before shoveling, inspect the area for obstructions such as cables and pipes.
- When shoveling, stand upright and bend your knees so your legs carry most of the load. Push the shovel blade into the soil or material to obtain a shovel load. Keep your arms and elbows close to your body when handling a shovel load.
- Lift the shovel load by straightening your legs.
- Never twist your trunk when raking or moving a shovel load. Always turn your feet and body in the direction where you wish to pile leaves or spread or drop the shovel load.
- Never overextend your arms or shoulders to load a shovel.
- When digging, use the ball of your foot to push the shovel blade into the ground.
- Shovel loads should not be thrown above about four feet or further than about three feet. Never toss of flip shovel loads over your shoulder. Keep shovel loads under 15 pounds.
- Never lay a garden rake down with the teeth pointing up the teeth should always be pointing down
- When raking or shoveling for long periods, vary your arm and leg positions and movements.
- If you are injured while using a rake or shovel, notify your project leader, parent, or guardian. Seek medical attention if the injury is serious.