Most homeowners generally do not consider lawn maintenance a dangerous activity. However, according to the Consumer Product Safety Commission (CPSM), more than 230,000 people per year are treated for injuries resulting from various lawn and garden tools and equipment including lawn mowers, trimmers, edgers, and other power equipment. These injuries range from minor to severe lacerations, loss of fingers, toes, and legs, broken and dislocated bones, mild to severe burns, and eye injuries. In 2001, the CPSM reported 167 deaths associated with lawn and garden tools; more than half involving riding lawn mowers and garden tractors. These accidents are avoidable, provided you make safety a regular part of lawn maintenance, particularly when operating lawn mowers and other power tools.

LAWN MOWERS

Lawn mowers are available in two types: walk-behind mowers and riding mowers. Though the method of control is different, both types of mowers present similar hazards to operators, bystanders, and animals that may be in the immediate vicinity. Rotary blades located underneath the mower rotate approximately 200 miles per hour or 300 feet per second. Though somewhat protected with guards, all mowers are potentially dangerous when the operator does not use good judgment or fails to follow safety procedures.

Walk-Behind Mowers

Walk-behind mowers include both self-propelled and push-type mowers. These types of mowers are commonly used by young children, since they are generally light in weight and easy to manipulate in most lawn conditions. Several safety features exist which help protect against accidental injury. For example, all new mowers have directional flaps or shielded discharge outlets that direct grass and any other projection from hitting the operator. Also, since 1978, walk-behind lawn mowers have been equipped with a clutch handle or switch that stops the blade within three seconds after the operator lets go.

Walk-behind mowers can be extremely dangerous to operators and bystanders when safety guards are removed, safety shut-down devices are disabled, and when mowers are operated in unsafe manner or environment. Practice the following safety tips to prevent injury:

- Do a walk-through of the yard prior to mowing. Remove any debris and obstructions including toys, limbs, rocks, wire, or glass. Locate all sprinkler heads, exposed electrical wire or cords, tree stumps, or exposed roots and pipe.
- Keep hands and feet away from the blade area while the mower is running.
- Never reach underneath or into the discharge chute to clear away grass or other obstructions when the blades are turning.
- Never bypass the engine kill handle or remove shields when mowing.
- Mow back and forth along the side of a steep hill, never up and down the slope.
Don't direct the discharge chute in the direction of bystanders.

Wear boots or shoes with good traction to avoid slipping and falling.

Don't allow young children to operate a walk-behind mower that they cannot safely control.

Be careful when refueling a hot engine. Use a funnel to avoid spilling fuel. Clean up any fuel spills immediately.

Never smoke while servicing, operating, and refueling a mower.

Wear proper protection against flying debris and noise (long pants, hard shoes, safety glasses, ear plugs, etc.)

Allow the engine to cool before storing it in a storage shed.

Turn the power off and disconnect the spark plug wire from the spark plug before cleaning, inspecting, adjusting, or repairing the cutting blade.

Don't run a gasoline powered mower inside a storage shed; this could cause carbon dioxide poisoning.

Never touch the spark plug with your hand or a tool when the mower is operating.

Never leave a running mower unattended, especially when children are around.

Don't mow a wet lawn. Losing control from slipping on rain-soaked grass is the leading cause of foot injury caused by power mowers.

When using an electric mower, keep the cord behind you. Trail it over your shoulder and mow away from the cord, never toward it.

Riding Mowers

Riding mowers save homeowners valuable time and energy. These small tractors are much more powerful than walk-behind mowers and move two to three times as fast. Drivers should treat riding mowers as they would larger tractors, using safe driving techniques and safety devices to avoid accidents. According to the CPSM, in 2001, more than 50 percent of 167 deaths associated with lawn and garden tools involved riding mowers and garden tractors.

New riding mowers come equipped with seat safety switches that stop the cutting blades from turning whenever the driver leaves the seat. Some riding mowers also have safety interlocks that will not allow the mower to be started unless all controls are in proper position and the driver is in the seat. In addition to the safety tips listed for walk-behind mowers, riding mower operators should take additional precautions.

Don't allow extra riders.

Test drive the mower, and become familiar with it before engaging the mower blade.

Put the riding mower into neutral before starting it of shutting is off.

Watch out for holes and hidden hazards.

Don't drive too close to a creek or ditch, and be mindful of any obstructions.

Make sure the transmission is out of gear and the mower blade clutch is disengaged before starting the engine.

Mow up and down sloping terrain. Do not mow across a slope.

Keep the mower in gear when going down slopes.

Slow down when turning and when working on slopes.

Always look behind you before backing the mower.

Disengage mower blade when on pavement, sidewalks or gravel lanes.

Don't operate a riding mower when under the influence of alcohol or other drugs that impair judgment.

Don't let children play in the lawn where you are mowing; they could be struck by flying objects.

Don't let children operate riding mowers until they can safely steer, brake, and adjust gears, and until they have had proper instruction.
POWER TOOLS

In addition to mowers, an assortment of power tools is available that helps us manicure and shape our landscapes. Electric and gas-powered weed trimmers, lawn edgers, hedge trimmers, and leaf blowers do the work that used to take days and many backaches to accomplish. However, this equipment is potentially dangerous and should be used with caution by those trained on how to use them safely. The CPSC estimates that in 1989 there were approximately 4,600 hospital emergency room-treated injuries associated with power lawn trimmers or edgers. About one-third of the injuries were to the eye.

Weed trimmers can throw stones, sticks, and other objects at high speeds. Lawn edgers with metal blades can cut through, splinter, or cause sparks. Hedge trimmers are sometimes heavy and difficult to hold for long periods of time, resulting in cutting accidents due to fatigue. Leaf blowers are loud and can produce air gusts in excess of 200 miles per hour, lifting small rocks and other objects into the air. Thus, special care should be taken to prevent these accidents.

Weed Trimmers

- Remove debris such as glass, limbs, rocks, and trash that could possibly become a projectile before trimming.
- Watch out for exposed electrical wires, communication lines, and extension cords that could be damaged by the trimmer string.
- Don’t remove protective guards and string guides.
- Monitor the string length. Automatic-feed and bump-feed trimmers may let out more string than you think; this might cause the string to strike you unexpectedly.
- Make sure all children and bystanders are out of the way before you begin trimming.
- Wear appropriate protective clothing and equipment such as long-pants, long-sleeve shirts, gloves, hard boots, goggles or safety glasses, and ear plugs.
- With electric trimmers, inspect all extension cords for cuts, nicks, scrapes, and exposed wire that could pose an electrical hazard. Replace damaged cords immediately.
- Don't operate electric trimmers when conditions are wet or around water puddles.
- Unplug electric trimmers and turn off gas-powered trimmers before inspecting, cleaning, adjusting, or replacing string.
- Never leave an electric trimmer plugged in or a gas-powered trimmer running while unattended.
- Before refueling gas-powered trimmers, place the trimmer on the ground and allow the engine to cool.

Lawn Edgers

- Make sure all children and bystanders are far away before starting the edger.
- Don’t start an edger if the blade is touching the ground. It could move unpredictably and possibly contact your feet and legs.
- Watch out for exposed electrical wires, communication lines, and extension cords that could be damaged by the edger.
- Wear appropriate eye protection such as goggles or safety glasses to guard against flying objects.
- Don’t remove protective guards or shields.
- Operate the edger at full blade speed.
- When edging along roadways, stay as close to the curb as possible to avoid being hit by passing vehicles.
- Never leave an electric edger plugged in or a gas-powered edger running while unattended.
- Unplug electric edgers and turn off gas-powered edgers before inspecting, cleaning, adjusting, or replacing the blade.
Hedge Trimmers

- Wear appropriate protective equipment including gloves, goggles or safety glasses, and ear plugs.
- Make sure all screws, blades, or chains are secure. Vibrating equipment can cause screws to loosen.
- With electric hedge trimmers, keep extension cords clear of blades.
- Disconnect extension cords and shut down hedge trimmers before inspecting, cleaning, adjusting or replacing blades.
- Do not leave hedge trimmers unattended, especially around young children who may be cut by sharp blades.
- Never use electric hedge trimmers over your head. If trimmers become lodged on something, disconnect the power source before attempting to dislodge it.

Leaf Blowers

- Don’t use the blower to clean yourself.
- Be aware of pedestrians and others in the area. Don’t direct the blower toward bystanders.
- Wear eye protection such as goggles or safety glasses and ear plugs.
- With electric blowers, inspect all extension cords for cuts, nicks, scrapes, and exposed wire that could pose an electrical hazard. Replace damaged cords immediately.
- Don’t operate electric blowers when conditions are wet or around water puddles.

LAWN AND GARDEN CHEMICALS

Many homeowners and landscape maintenance companies rely on periodic applications of natural and synthetic insecticides, herbicides and fungicides to treat for a variety of insects, invasive weeds, and plant diseases. If you are thinking of using a lawn and garden chemical, read the label carefully to determine the product’s toxicity to humans, animals, and the environment. The product label will give the recommended application rate and instructions, and will advise of any protective clothing or equipment required to apply the product. Heed the label directions, and use only the amount of chemical specified.

Carefully consider the potential effects on the environment and beneficial insects in your landscape when selecting lawn and garden chemicals. For example, rather than using a general purpose pesticide that may kill beneficial insects, use products that treat the specific problem.

- Remove children and animals from application area (follow label directions for re-entry.)
- Avoid exposure to skin, eyes and nose during and after application.
- Close all doors and window to house.
- Remove animal water and feed containers, and protect bird baths and fish from chemical exposure.
- Avoid over-irrigating exposed area; pesticides may be washed away or become concentrated in standing water puddles.
- Use only the recommended amount; more chemical than prescribed will not do a better job.
- After application, store extra chemicals in a secure location that is out of reach of children and pets.
- Never store lawn and garden chemicals with or near food, animal feeds, or medical supplies.
- Keep chemicals locked in a well-ventilated storage area, where temperatures stay above freezing and less than 90 degrees.

All programs and information of Texas AgriLife Extension Service are available to everyone without regard to race, color, religion, sex, age, handicap or national origin.