Mow Your Lawn Safely¹

THE UNIVERSITY OF TENNESSEE AGRICULTURAL EXTENSION SERVICE

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Every homeowner owns lawn and garden equipment of some type. This equipment is so common and used so frequently that the dangers associated with its operation are often ignored. Probably the most dangerous piece of equipment used around the house on a regular basis is the lawnmower. Each year approximately 75,000 people are injured seriously enough by lawnmowers to require emergency room medical treatment. Injuries may range from minor cuts and bruises to amputations and even death.

Only a small percentage of the injuries are caused by mechanical failure. Most are the result of human error, including lack of familiarity with the mower, loss of control, operating in poor conditions, operating in the vicinity of other people, improper clothing and allowing children to operate the equipment.

You can become familiar with your mower by reading the owner's manual before the first time the mower is needed. It contains information specific to that machine such as the location of all controls, starting procedures, maintenance instructions and safety rules. Always read the owner's manual before operating a machine with which you are not totally familiar.

Proper clothing is essential to protect your body from harm. Always wear sturdy, non-slip shoes instead of tennis shoes or sandals. Steel-toe safety footwear offers the most protection against the blade. Long pants help protect your legs from objects which may be thrown from under the mower, such as small rocks and sticks. Hearing protection is also needed to prevent hearing loss caused by exposure to the high noise levels.

Children and power equipment do not mix. They should be kept separate. Youngsters always want to help with jobs around the house, though, and are often allowed to cut the grass even though they are not really mature enough to handle the task safely. They are also very quick, and a mower left running and unattended even for "just a minute" can be fascinating to a child. Never leave a mower running unattended for any length of time. If the mower has electric start, the key should never be left in the switch.

The main source of danger is the blade which does the actual work of cutting. In order to perform its task efficiently, the blade must be sharp and travel at a high speed. This sharp, high-speed blade can cause serious injury if a hand or foot is allowed to get under the mower deck while the engine is running. Never attempt to unclog or work on a lawnmower while the engine is running. Any time it is necessary to reach under the mower, disconnect the sparkplug wire to insure that the engine cannot start for any reason. It does take a little extra time to restart the engine every time, but not as long as it does to recover from a serious injury.

The manner in which the lawnmower is operated on slopes is also important. Push mowers should always be operated across the slope so your foot will not get under the mower if you slip, nor will the mower roll down the slope and run over you (see Figure 1). Pulling a push

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Figure 1. Use hand mowers in areas too steep for the safe operation of lawn and garden tractors.

type mower is also dangerous, as your foot might slip under the mower. Riding mowers are generally more stable when operated up and down the slope. Avoid operating on steep slopes or near ditches to prevent overturning. Never operate a riding mower on steep slopes by walking alongside the mower as you run it across the slope. There is too much risk of losing control and you are setting a bad example for others.

There is also the danger of objects being thrown from under the mower by the blade, whose tip may be moving as fast as 200 miles per hour. A person struck by a rock or piece of wire thrown with such force could experience severe injury or even death. Always check the lawn for loose objects which could be thrown by the mower and remove them before starting to mow. For their protection, children, pets or other people should be moved away from the area to be mowed. You can increase your safety by making sure that all the shields are in place on your mower.

Refueling hot engines and smoking while refueling can result in serious burns, often to large portions of the body. Always allow the mower to cool down before refueling, perhaps taking a rest period at the same time. Any gasoline which is spilled should be wiped up immediately. Always refuel outdoors and move away from the fueling location at least 25 feet before starting the engine to avoid igniting fuel vapors which may linger for some time.

Another source of danger is that of carbon monoxide poisoning. Carbon monoxide is a colorless, odorless and tasteless gas. It is absorbed into the bloodstream through the lungs approximately 210 times easier than oxygen, leaving very little oxygen available for body tissues. Whenever an engine is started in an enclosed area, such as a garage, the danger of carbon monoxide poisoning exists. Symptoms include weakness, nausea, headache and visual problems. Any time you suspect that you or someone else is a victim of carbon monoxide poisoning, move immediately to fresh air and call a doctor or poison control center for further advice. Always move outdoors before starting the engine so that the dangerous gases cannot accumulate.

Keep the blade sharp to reduce the power required and to provide smoother cutting, and run the engine at the lowest speed that will do the job. The lower blade speed will reduce the force with which objects are thrown by the mower while at the same time reducing engine wear.