**Objective: Identify hazards associated with rotary mowers and methods for reducing those hazards.**

**Trainer’s Note**

Rotary mowers include sit-down mowers and towed mowers. A rotary mower is a useful piece of equipment to landscapers, but misuse can be deadly. For this module:

 • Review the information below on rotary mowers, hazards, and safety tips.

 • Demonstrate the safe use of a rotary mower. Present the demonstration in the shop or
 in an open field.

 • Ask an employee who normally operates the rotary mower to assist with the session.

 • Review the important points.

 • Have workers take the True/False quiz to check their learning.

**Background**

Knowing the capabilities of the mower allows for the use of the right mower for the job. The operator’s

manual will help determine if the mower is designed for the job. Keep bystanders away from:

* Mowing/tractor controls.
* Mowing blade.
* Throwing distance and direction for that blade.

**Never** allow riders on the equipment.

Remove all litter and debris from the area to be mowed. Stones, tin cans, and wire can be deadly when thrown by a mower blade. Be alert for holes and ditches; these hazards may cause the driver to lose control of the mower.

When using a tractor equipped with a rollover protective structure (ROPS), wear a seat belt. Wear tight and belted clothing that won’t get tangled in moving parts. Wear protective equipment for eyes, hair, hands, hearing, and head. For more information refer to these Tailgate Safety Training modules:

* *Personal Eye Protection*
* *Protective Gloves*
* *Protecting Against Noise*
* *Protecting the Head*

Before dismounting from the tractor, always disengage the power-take-off (PTO), turn off the engine, and set the brakes. When approaching the mower, make sure that the blades are not rotating. Be aware that the blades will continue to rotate for a while after the power has been shut off.

Be cautious while making turns. If the rear tractor wheel of a pull-type mower catches the mower frame, it could throw the operator. The three-point hitch-mounted mower can swing outward when turning. Adding front wheel weights for balance and control and a wide setting for the rear tires enhances tractor stability and reduces the chance of a tractor overturn. Do not operate on steep slopes. Operate at a safe speed.

Hazard risks increase when equipment is not well maintained. Know the proper maintenance procedures. Check machinery for loose parts and blade sharpness. Replace blades that are too dull to sharpen. Rotary mowers are equipped with runners and safety guards. To avoid excessive wear on the runners, keep the mower just high enough to avoid riding on the runner shoes.

Keep all guards in place and well maintained. The PTO must be shielded. Use chain or belt guards to reduce the possibility of objects being thrown from under the mower

Manufacturers recommend that children not be allowed to operate a tractor equipped with a rotary mower because of the danger involved. Young workers may be able to operate a sit-down mower of less than 20 horsepower — but only on level ground and with supervision. Under federal child labor regulations, 14- and 15-yearolds may not operate power-driven machinery like rotary lawn and brush mowers.

**Safety Tips**

* Keep all guards in place.
* Drive cautiously and know the area.
* Always read the owner’s/operator’s manual.
* Keep others away from the area being mowed.
* No riders — driver only.
* Know the child labor laws.
* Wear a seat belt when the tractor is equipped with ROPS.

**Review These Important Points**

* Know the capabilities of the mower.
* Check for debris, holes, and obstacles prior to mowing.
* Add tractor weights and wider tires if needed.
* Know and follow maintenance procedures.
* Keep all guards in place at all times.
* Know the law when hiring youth to drive mowers.

**Verbal Quiz**

1. Riders can safely ride on a tractor. **T F**

2. There is no need to check the area before mowing. **T F**

3. If maintenance is required, guards do not need to be replaced. **T F**

4. Always disengage the PTO, turn off the engine, and set the brake before dismounting **T F**
 from the tractor.

5. Knowing the capabilities of the mower is important. **T F**

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| Answer Key |
| 1 | F |
| 2 | F |
| 3 | F |
| 4 | T |
| 5 | T |