



Lawn Care: Rotary Mower Safety

Objective: To promote the safe use of lawn mowers.

How to Use This Training Module – Steps to Success

- Read the operator's manual and understand mower operation and safe practices.
- Ask your supervisor to point out the safety features on rotary mowers.
- Ask your supervisor to demonstrate the safe use of rotary mowers and mower maintenance.
- Become familiar with personal protective equipment (PPE) and understand when different types are to be used.
- Discuss common mowing accidents and ways to prevent them with your supervisor.
- Review the important points in the Review section of this module.
- Take a quiz — available at <http://connect.ag.vt.edu/safe-mower/> — to check your understanding of rotary mower safety.

Background

Rotary mowers are very useful types of equipment, but they are dangerous, with the potential to cause serious injuries. Their blades rotate at a high speed of 2,000 to 4,000 revolutions per minute. The equivalent speed at the blade tip or the speed of debris thrown by the mower blade may range from 100 to 200 miles per hour. In order to prevent serious injuries, the operator should be able to disengage the blade and turn the engine off quickly.

Safety Tips for Operating a Rotary Mower



- Read and understand the operator's manual and become familiar with the machine.
- Remove all loose objects from the area before mowing.
- Use recommended personal protective equipment and close-fitting clothing when operating a lawn mower.
- Disengage the blade before starting the engine.
- Make sure all guards and safety shields are in place.
- Never disengage any safety switches or devices.
- Never refuel the mower when its engine is hot or running.
- Avoid mowing when the grass is wet.
- Store gasoline in an approved container with proper labeling.
- Turn off the engine before cleaning the area under the deck.
- Disconnect the spark or electric plug before troubleshooting or repairing the mower.
- Perform routine maintenance as recommended by the manufacturer.
- Keep a running mower away from bystanders and pets.

Safety Tip for Push Mowers

- Start a push mower only when standing up with both feet placed firmly on the ground.



Safety Tip for Electric Mowers

- Never use an electric mower to mow wet grass.

Safety Tips for Riding Mowers

- Keep both feet on the foot rests when operating a riding mower.
- Turn off the riding mower engine before dismounting.
- Do not allow extra riders on any type of mowers.
- Be aware of power takeoff (PTO).
- Do not use cell phones or music listening devices when operating a riding mower.

Be Aware of Mowing Hazards

- A mower can tip over easily.
- Push the mower away from the operator during a fall.
- Never leave a running mower unattended.
- Mower blades can throw loose objects at high speeds. Make sure the area to be mowed is free of loose objects.

Proper Mowing Directions

- When mowing on a slope with a riding mower, mow **down** the slope.
- When mowing on a slope with a push mower, mow **across** the slope.

Proper PPE for Mowing

- Wear sturdy, steel-toed work boots during mowing.
- Wear long pants and long-sleeved shirts for good protection against sun and dust.
- Wear proper sunblock for protection against sun.
- Use safety glasses or goggles, especially when mowing in areas with loose objects.
- Use ear protection when mowing.

Review

- A rotary blade turns at 2,000 to 4,000 revolutions per minute. The equivalent speed at the blade tip or the speed of debris thrown by the mower blade may reach 100 to 200 miles per hour.
- Wear appropriate PPE and snug clothing when mowing.
- Make sure the guards and safety shields are in place.
- Never disengage any safety switches or devices.
- Turn off the mower before cleaning under the deck.
- Know how to disengage the blade and shut the engine off quickly.
- Never leave a running mower unattended.

Acknowledgements

This publication was developed with the support of National Youth Farm Safety Education and Certification (grant No. USDA/NIFA-2010-41521-20830), National Institute of Food and Agriculture, and the U.S. Department of Agriculture. The team that developed this publication is solely responsible for its content; it does not necessarily reflect the views of the U.S. Department of Agriculture or the U.S. Department of Labor. Team members are Robert Grisso, John Perumpral, Don Ohanehi, Mike Goatley, Kathleen Jamison, Cathy Sutphin, Dan Swafford, and Carl Estes.

The team would like to express appreciation for the reviews and comments by David Balderson, teacher, Atlee High School; Phil Blevins, Virginia Cooperative Extension agent; Deborah Chaves, instructor, Monroe Technology Center; Sonya Furgurson, VCE associate agent; Michael Hopkins, instructor, Louisa High School; Emerson Lynn “Kip” Kirby Jr., teacher, Richlands High School; Michael Lachance, VCE agent; Alyssa Walden, VCE associate agent; A.J. Powell Jr., professor emeritus, University of Kentucky.