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Safety Training Article

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Avoiding Common Mower-related Mistakes

Key Points

- Some of the most frequent and serious injuries in the landscape industry involve mowers, but because crew members are so familiar with these machines, it's easy to overlook the hazards associated with them.
- Each year, approximately 70,000 people are treated in hospital emergency rooms for mower-related injuries, according to the U.S. Consumer Product Safety Commission. Injuries are split almost equally between those involving walk-behind mowers and those involving riding mowers. About 90 people die annually due to these incidents, usually when riding mowers overturn (crushing operators or pinning them under water) or when the machines run over victims. Finger, toe, hand, and foot amputations are possible, and cuts and lacerations can require emergency surgery. Injuries are extremely painful and can cause permanent disability.
- The beginning of the lawn-care season is a good time for refresher safety training. The following tips can help prevent some of the most common mower-related safety mistakes.

Employers' and Supervisors' Checklist:

- ✓ Provide training related to each particular mower employees are asked to use and ensure employees understand this training. Instruction should include all operation and safety guidelines in the machine's operating manual, any safety messages attached to the machine and a discussion of hazards associated with the equipment and necessary safety precautions. Remember, training must be provided in a language the employee understands. Make operating manuals available to employees, and keep records showing which machines each crew member has been trained to operate.
- Make sure crew members inspect the site before mowing for obstacles, debris and other objects that could be thrown from the mower. Hitting sprinkler heads is common. Consider providing orange flags for crew members to mark sprinkler locations. Another solution is to cut grass around sprinkler heads with a line trimmer before mowing. Repair sprinkler heads that don't fully retract, and teach employees to set equipment at a proper height to avoid damage.
- Take steps to improve PPE (personal protective equipment) compliance. When mowing, crew members should wear safety goggles or safety glasses with side shields, steel-toed footwear, hearing protection, non-baggy attire including pants and long-sleeved shirts, gloves and reflective vests. During regular safety meetings, review the PPE requirements for different types of equipment, including mowers, and consider placing labels with PPE requirements on your machines. Other helpful strategies include placing PPE in one, easy-

to-access area at your office (so crew members will know where to find it), creating pre-shift checklists that include PPE needed for each task, making crew leaders responsible for reviewing these checklists and ensuring PPE is gathered and storing extra supplies of commonly used PPE in company vehicles.

- Provide mowers with as many safety features as possible and properly maintain the machines and safety devices/systems. If you own zero-turn mowers not equipped with rollover-protection structures (ROPS), contact the manufacturer. Most will retrofit their products for free.
- ✓ Train crew members to properly load, unload, secure and transport mowers and fuel.
- ✓ Be sure crew members are aware of the following dos and don'ts.

Crew members' dos and don'ts

Do:

- Wear appropriate clothing and PPE when mowing: safety goggles or safety glasses with side shields, steel-toed footwear (no tennis shoes), hearing protection, non-baggy attire including pants and a long-sleeved shirt, gloves and a reflective vest.
- In addition to receiving training, read and understand the operator's manual for each mower before you operate it.
- Prior to each use, inspect the mower for defects such as loose hardware, damaged parts, low tire pressure or missing safety guards or devices. Report any problems to your crew leader.
- Scout the site, removing objects and other debris that could become projectiles and noting potential hazards such as sprinkler heads, holes or drop-off areas, before starting the mower.
- Ensure the mower's rollover protection system (ROPS), if equipped, is deployed and locked in place. If you must fold down the ROPS to avoid overhead obstacles, return it to its upright and locked position as soon as possible.
- Wear the seat belt if the mower you're using is equipped with one and roll-over protection is deployed. If the seat belt is damaged or missing, notify your crew leader or supervisor.
- Drive up and down (not across) slopes when operating ride-on mowers. When using a walk-behind mower, do the opposite: operate across slopes rather up and down them.
- Turn off the engine and let it cool before refueling. The nozzle should contact the rim of the tank while you add fuel. Never smoke or have an open flame near fuel.
- Follow all training related to loading, unloading and transporting mowers and fuel. If you have not received this training, leave these responsibilities to someone who has.

Don't

- Be complacent about safety. Just because you've operated a lawn mower thousands of times without having an accident doesn't mean one can't occur.
- Operate a mower until you've received training on that particular model. Instruction should include all operation and safety guidelines in the machine's operating manual, any safety messages attached to the machine and a discussion of hazards associated with the equipment and necessary safety precautions. Remember, training must be provided in a

language you understand.

- Bypass the safety seat switch, which turns off the mower when the operator's seat is unoccupied.
- Tamper with or remove any safety feature or device.
- Use a mower with the safety discharge shoot or mower deck deflector shield removed or in an unsafe position.
- Put hands or feet near discharge chutes or beneath mower decks. Never attempt to unclog a mower deck with your hand or foot. Use a long instrument instead. Turn off the engine and wait until all moving parts come to a stop. Be aware stored energy trapped in the blade mechanism could cause it to spin rapidly once the material blocking it is removed.
- Mow on slopes greater than the mower manufacturer's recommended steepness typically not more than 15 degrees for a riding mower and not more than 20 degrees for a walkbehind mower.
- Operate a riding mower close to water, retaining walls or drop-offs. Wet, unstable ground near water could cause the machine to overturn or slide into a lake or pond. Even if the water is not deep, you could be pinned under the mower and drown. Stay at least two riding mower widths away from these hazards.

Insights for this article were provided by Bryce Christianson of Titan Landscaping and Sitework Contracting, Joe Ehrenreich of Young's Landscape Management, Scott Jamieson of Bartlett Tree Experts and Dr. Sam Steel, NALP safety adviser.

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