

Rollover protective structures and seat belts keep employees safe when operating zero-turn mowers

Why is worker safety at risk?

When manufacturers provide rollover protective structures (ROPS) and seat belts on zero-turn mowers, the safest way to operate the mower is with the ROPS in the upright position and the seatbelt fastened. Not using the manufacturer provided ROPS and seat belt when operating a zero-turn mower increases the potential of injury in the event the mower overturns.

Employers, it is your responsibility to provide training on how to properly use these commercial mowers, including the ROPS and seat belt. In addition to training, employers must ensure ROPS are always in the upright position and a seat belt is used every time a zero-turn mower is being operated by a worker.

What happened in Massachusetts?



In June 2017, a 57-year-old equipment operator was killed while operating a zero-turn mower with the ROPS folded down. At the time of the incident, the equipment operator was working alone while mowing grass. As the operator turned the mower to the left, it struck a low-lying rock covered by vegetation. The mower overturned, pinning the operator against the ground. Eventually, a motorist passing by noticed the overturned mower, stopped, and placed a call for emergency medical services (EMS).

CORRECT ROPS PLACEMENT



**ROPS ONLY PROVIDE
PROTECTION WHEN
USED UPRIGHT**



Recommendations

ALWAYS KEEP THE ROPS IN THE UP POSITION



ROPS on zero-turn mowers are designed to help protect the operator. It is important to keep ROPS in the upright position as it creates a protected area in the event of a mower overturn.

WEAR YOUR SEAT BELT WHEN THE ROPS IS UP



ROPS help keep operators safe, but only when used with a seat belt. If a mower overturns, the seat belt will help keep the operator in the mower's protected area, preventing a crushing.

INSPECT THE AREA THAT WILL BE MOWED



Identify areas that should not be mowed with a zero-turn mower. This includes slopes greater than 15° and areas with overhead obstructions which could interfere with an upright ROPS.

IMPLEMENT A BUDDY SYSTEM



To increase the chance of survival in a mower overturn, you need to get help quickly. A buddy system will ensure medical assistance is quickly reached if an incident occurs.

Resources

MA Department of Labor Standards (DLS) On-site Consultation Program

DLS offers *free* consultation services to help employers recognize and control potential hazards at their worksites, and assists in training employees.

<https://www.mass.gov/on-site-consultation-program>

MA Department of Labor Standards (DLS) MASSsafetyWorks!

MASSsafetyWorks! provides resources for employers on how to improve workplace safety.

<https://www.mass.gov/doc/rollover-safety-for-riding-mowers>

Occupational Safety & Health Administration (OSHA)

OSHA enforces standards by providing training, outreach, education and assistance. The materials on their site are available in multiple languages.

https://www.osha.gov/dsg/riding_mowers/index.html

MA Department of Industrial Accidents (DIA)

DIA has grants to provide workplace safety training to employees. Companies covered by the state's Workers' Compensation Insurance Law may apply.

<https://www.mass.gov/the-dias-workplace-safety-training-grant>

SPECIFIC INCIDENT REPORTS



MA FACE, MA Department of Public Health (MDPH)

Equipment Operator Dies After Zero-Turn Mower Overturns - Massachusetts

<https://www.mass.gov/doc/equipment-operator-dies-after-zero-turn-mower-overturns-massachusetts>

Full investigation reports on other work and safety incidents are available online.

<https://www.mass.gov/fatal-work-related-injuries>



About MA FACE: Massachusetts Fatality Assessment and Control Evaluation (MA FACE) seeks to prevent work fatalities by identifying and investigating these incidents and developing prevention strategies for those who can intervene in the workplace. MA FACE is supported by CDC-NIOSH, cooperative agreement # U60OH008490. This document may be copied free of charge and found online at www.mass.gov/dph/FACE. If you have comments or questions, call the MA FACE Project at 1-800-338-5223.

