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FOR IMMEDIATE RELEASE

By UNMC, Central States Center for Agricultural Safety and Health, Omaha, NE

ROLLOVERS: NO ONE HAS TO DIE *Simple protection helps save lives.*

No one expects tragedy to overtake them. Yet, each year some 250 lives are lost in tractor-related injuries such as rollovers, runovers and collisions. One of the leading causes of injury and death on the farm are tractor-related accidents. Nearly half of these deaths are due to tractor rollovers.

The occupational fatality rate in agriculture is close to 800% greater than in all other industries combined.

Aaron Yoder, Ph. D., Associate Professor, Biological Systems Engineering, University of Nebraska-Lincoln; Associate Professor, Environmental, Agricultural and Occupational Health, University of Nebraska Medical Center, says use of Roll Over Protective Structures (ROPS) is the easiest way to reduce the potential for rollover deaths.

"Research from around the world shows that death and serious injury are virtually eliminated when

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ROPS are installed and seatbelts are worn," Yoder says.

All tractors manufactured after 1985 were designed to include ROPS. These structures should never be removed or modified – welded, cut down, etc.

"Modifications can negatively impact the integrity of the ROPS and impair its effectiveness in a rollover incident," Yoder says. "To ensure your tractor's ROPS is in good condition, periodically check it for any damage or signs of rust and cracks. Check the seat belt, too. If you have concerns about its condition, consult your dealership to help correct any issues."

Three types of ROPS can help protect tractor operators:

- Two-post ROPS
- Four-post ROPS
- ROPS with enclosed cabs

Two-post ROPS, which form a u-shape over the driver's seat, are the most common ROPS type. The upright posts are usually vertical or set at a slight angle and mounted to the rear axle. This type of ROPS is either rigid or foldable.

A foldable ROPS has a specially designed hinge that allows the structure to fold so it fits in lowclearance areas. Anytime the ROPS is folded down during use in a low-clearance setting, it should be raised and locked again once that work is completed. Unless a foldable ROPS is in its upright position, it cannot provide adequate protection during a rollover.

A four-post ROPS is mounted to both the tractor axle and the frame in front of the operator.

Typically, a tractor with an enclosed cab includes a ROPS that's part of the manufacturer's cab design.

The majority of cabs on tractors feature a built-in ROPS.

A falling object protective structure (FOPS) is a specially designed canopy that protects tractor operators from falling objects. FOPS are especially recommended for use on front-end loaders and when working in wooded areas or other situations that may involve falling objects. Most FOPS are used on tractors with four-post ROPS or ROPS with enclosed cabs.

Tractors manufactured before 1985 can and should be retrofitted with ROPS and seat belts. The tractor dealer should be able to assist in acquiring the appropriate ROPS and seat belt kits. Find more information at this link:

<u>http://rops.ca.uky.edu/?utm_medium=301&utm_s</u> <u>ource=www</u>.

All commercial ROPS meet specified safety standards to ensure that they withstand a rollover. For that reason, a homemade ROPS that does not conform to industry standards cannot be verified to be safe to withstand crushing, static or dynamic pressures. A certified ROPS will bear a certification label.

Two- and four-post ROPS labels are applied directly to the posts. The ROPS in an enclosed cab should be located on the edge of the cab door.

FOPS must also meet specific standards. If there is any question about whether or not your ROPS is certified, consult the ROPS supplier or equipment dealer.

The full cost of a tractor rollover death or injury are difficult to determine because there's no true way to measure the value of a life. The cost of losing an operation impacts the producer and his family, the community and the region for many years. A lifelong injury can impact the injured person and many others related to and interacting with them in multiple ways.

It is estimated the cost of tractor rollover deaths and injuries to U.S. agriculture is \$115 million per year. Those surviving a rollover incident can expect to see losses average some \$900,000 with the combined cost of medical care, lost time and property damage.

Since cost-share ROPS programs have been made available across the nation, the average cost of installing a ROPS is approximately \$391. More information on retrofitting can be found at https://www.ropsr4u.org.

"Some of the reasons people don't install ROPS can be attributed to customs, costs and convenience," Yoder says. "We all have a tendency to think that those kinds of tragedies only happen to 'someone else.'"

By using ROPS and seat belts, the number of runovers caused by an operator falling from being ejected from the seat can also be reduced. Other precautions related to reducing runovers include adding or leaving bypass shields on starters and keeping electrical systems in good working condition. Extra riders should also be prohibited.

"Producers have to use tractors to do their farm work," Yoder says. "Without tractors, food production would fall far short of meeting needs. At the same time, no other farm machinery is so linked to injury and death hazards as the tractor."

To help reduce potential for tractor rollovers from transporting and working, follow these safety guidelines:

- Equip your tractor with Slow Moving Vehicle (SMV) signs.
- Equip your tractor with emergency lighting, turn signals and mirrors.
- Properly hitch farm equipment.

- Understand that tractors become unstable when improper hitching is attempted.
- Hitching or towing at points other than the drawbar may result in a rear overturn.
- Reduce speed when turning.
- Avoid operating tractors near ditches, embankments and holes.
- If you get stuck, get help from another tractor.
- Prohibit stunt driving and horseplay.
- When the tractor is stopped, securely set the brakes.
- Regularly inspect your tractor.

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