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PRESS RELEASE

For More Information:

ELLEN G. DUYSSEN

Central States Center for Agricultural Safety and Health

University of Nebraska Medical Center

College of Public Health, Room 3035

984388 Nebraska Medical Center

Omaha, NE 68198-4388

402.552.3394

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

SKID STEER SAFETY

Know the hazards.

Skid steers are popular because they are compact, powerful, and versatile machines that fit into a small space and complete various types of jobs on the farm. They're small enough to scoop out animal waste, lift a tree into a landscape site, and quickly move rock, feed, manure, or building materials. With numerous attachments, skid steer loaders are often as valuable a tool as any farm or utility tractor.

For all their capabilities, these machines have their limitations. According to Pennsylvania State University Extension, misunderstanding and underestimating how to safely operate a skid steer can lead to serious consequences.

The major hazards of skid steer use include being runover by the machine, caught in an attachment, crushed between machine parts, trapped by loads that roll or drop into the operator station, being

pinned by a rollover, or tipping the machine. A runover can occur when an operator falls from the skid steer while operating it or when workers on the ground are out of the sight line of the operator. Runovers may also happen if the operator allows riders in the skid steer bucket, and they fall, or bystanders wander into the work area and the operator doesn't see them. Statistics show that these bystanders are often children. However, they may also be co-workers.

Entrapment injury can occur if the operator attempts to maneuver controls and levers from outside the skid steer's protective frame, or due to miscommunication between the operator and a helper. Mangled hands and arms or amputations after being crushed between the lift arms of the skid steer and the frame of the machine are some common results of entrapment.

Feet and legs have been crushed between the skid steer and accessories such as buckets or tree augers attached to the lift arms. Working beneath a raised skid steer bucket has led to entrapment which may result in a fatal crush injury.

If the skid steer is used to pick up bulky material that doesn't adequately fit in the bucket or isn't properly secured, the load may roll back into the operator station. The skid steer's protective frame offers some protection from larger objects that don't break apart, but smaller objects – i.e. feed containers, landscape stones/brick pavers – may enter the operator station and injure them.

Excessive weight in the bucket or caused by a heavy attachment in a raised position can cause the skid steer to top forward. This may throw the operator out of the cab if the seat belt isn't used or is in disrepair. This can result in a runover and being crushed by the bucket and/or load.

Skid steers should have ignition interlocks that prevent operation of the machine if the seat belt

isn't buckled or the restraint bar isn't in place. Operators sometimes disable these safety devices, exposing themselves to serious injury or death if a tipping incident occurs. A rollover can happen at anytime the machine is being operated on steep slopes or uneven terrain. The skid steer may become unstable when a heavy load is raised high in the bucket.

When used for scraping manure, concrete floors and ramps, and skid steer tires, can become worn, resulting in less traction during operation. This may result in the skid steer losing traction on slippery manure push-off ramps, especially if the operator is moving at a high rate of speed due to being rushed. Quick starts and stops with a loaded bucket can result in toppling the machine forward over manure storage fences, guardrails, ramp stops, or embankments.

Hydraulic pressures systems pose many hazards since the system pressure often exceeds 2000 pounds per square inch (psi). A hydraulic hose pinhole leak may not be visible, and if suspected do not use your hand to search for the leak. Injury from injected hydraulic oil will demand immediate emergency medical treatment. If treatment is not obtained, it may result in an amputation of the hand or arm.

Wearing eye protection and gloves, use a piece of cardboard or mirror to inspect for leaks by passing the material over the suspected leaks. Be aware that hydraulic hoses and fittings become very hot and severe burns may result from contact with them. Any leak should be immediately repaired.

It's critical that operators understand the center of gravity for a skid steer constantly shifts as you use the machine. When on a level surface, two-thirds of the skid steer's weight is in the rear section of the machine and low to the ground at the rear axle. As a load is lifted, the weight is transferred to the front axle. The higher the load is lifted, the higher

the skid steer's center of gravity. Excessive weight in the bucket or attachments can cause the machine to tilt forward. To maintain a low center of gravity, loads must be carried low. However, don't carry the load so low that the bucket or attachment digs into or hits obstacles or curbing. Be aware of the manufacturer's weight limit and don't exceed it.

If it's necessary to move the skid steer on uneven ground, have a thorough understanding of the machine's center of gravity under these conditions. Keep the heavy part of the machine and load pointed uphill. When moving across uneven terrain without a load, keep the back end of the machine pointed uphill (go downhill forward; go uphill in reverse). To move a load across uneven terrain, back down the hill with the load, travel forward up the hill.

Using a skid steer that doesn't feature a rollover protective structure (ROPS), a falling object protective structure (FOPS), side screens, and an operator restraint invites injury and death. The ROPS protects against being crushed by the machine if it should overturn. The FOPS provides overhead protection against tree limbs, overhead hazards, and loads that may fall from the loader bucket. Side screens eliminate the risk of the operator reaching out of the cab or co-workers and bystanders reaching into the cab and becoming entangled between lift arms and the skid steer frame.

A seat belt or seat-bar restraint help keep the operator in the skid steer seat and in control of the machine. The machine's sudden pitch forward could throw the operator out of the cab if they are not restrained. ROPS, FOPS, side screens and seat restraints offer a "zone of protection" for skid steer operators.

An operator restraint interlock system will prevent the skid steer engine from being started or

hydraulic controls from being engaged if the operator restraint isn't fastened or positioned correctly. Don't disable this interlock system and insist that all operators use it.

Reverse signal alarms/beacon lights may not be standard equipment on all skid steers. These alarms give notice to on-ground workers of the movement of the skid steer. They should be used to reduce risk of runovers and potentially pinning co-workers between the machine and an obstacle. These features are economical and easy to install. Consult your dealer for more information on backup alarms and beacon lights.

Learn as much as you can about the hazards related to use of a skid steer loader and employ all recommended safety principles as you operate the machine.

Source: Penn State University
Skid Steer Safety for Farm/Landscape

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