

# MAFES Dawg Tracks

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MISSISSIPPI STATE UNIVERSITY™  
MS AGRICULTURAL AND  
FORESTRY EXPERIMENT STATION

*Safety Tips:  
Safe Handling Big Bales*

Large, round bales provide an efficient and economical way to harvest hay, but they also pose safety problems. Large bales are bulky and heavy, weighing usually from 1500 to 2000 lbs.

They are designed to repel rain and prevent spoilage. Their shape lends themselves to easily rolling down inclines or off the end of raised loaders. In our area large bale usage is more common. Occasionally, small bales are seen and I believe that they are for horse owners with forage that is more easily digestible.

The National Institute for Occupational Safety and Health (NIOSH) estimates that approximately 75 agriculturalists were killed from 1992 through 1998 while handling, harvesting, or working near large bales and large bale equipment; 42 were killed while preparing bales for transport or while moving them; 34 of the 42 incidents tractors were involved. In a number of these, **Rollover Protective Structures (ROPS)** and handling equipment were not used.

To reduce the risk of injury or death, NIOSH recommends the following safety measures;

- ✓ Rig tractors with **Rollover Protective Structures (ROPS)** and a seat belt. Using the **ROPS** with the seat belt that 99.9% of tractor accidents resulted in minor injuries and no deaths. Now most all tractors are equipped with the ROPS. However, most brands offer factory made structures that can be installed “after- market” at dealers.
- ✓ Make sure the equipment is in good repair, weighted properly, and able to carry loads safely and securely.
- ✓ Before starting a hay baling project, check the area for safe paths - ones that are flat, firm, free of obstructions, and are a safe distance from holes, ditches or ruts.
- ✓ When stacking, loading, or moving bales with a front-end loader, use attachments designed to handle large bales, such as grapples and front-end bale spears.
- ✓ Do not raise or lower the loaders while the tractor is moving.

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- ✓ When moving bales, but not stacking or loading them onto trailers, use tractors with rear-end bale spear attachment, if possible.
- ✓ Make sure that the tractor has headlights, taillights, warning flashers that are in good working condition. Anytime that you are moving bales, be sure to have your lights on and make sure that the bale is not obstructing the lights when the loader is in the safe, lower position. Obviously, moving bales during daylight hours is the safer choice, when possible.
- ✓ When you're moving up or down a slope, keep the bale on the upslope end of the tractor with the spear at the lowest possible position. For example, if you're using a front-end loader, the operator should drive uphill and back downhill. If you have a back-end spear, then you should drive downhill and back uphill.
- ✓ Assuming that you, the operator, must leave the tractor-lower the attachments-stop the engine-remove the key and secure the tractor to prevent it from rolling.
- ✓ Make sure that the tractor front-end loader is counter-balanced. Be sure to check to see that the axles and tires are strong enough to handle maximum loads when needed. Do not exceed the rated capacity of the lifting machinery.

As noted in the statistics above, transporting and stacking large hay bales has resulted in numerous injuries and deaths. Many of these incidents could have been prevented, if the equipment had been better suited for the type of hay operation being done and if the operators had been more cognizant of the safety factors involved.

We don't mean to “beat a dead horse to death,” but most all of our stations have late model equipment, all equipped with **ROPS and Seatbelts. PLEASE-FORM THE HABIT OF USING THEM AS YOU DO IN YOUR PRIVATE VEHICLES!**

**PRACTICE SAFETY IN ALL  
YOU DO -  
EVERYONE DEPENDS ON  
YOU!!**

**#####**

**SAFETY <> YOU DO MAKE A  
DIFFERENCE!!**