

MAFES Dawg Tracks



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Recognizing Common Farm Equipment Hazards



Operating farm equipment, no matter how careful and cognizant we remain, is still dangerous and hazardous. It is critical to recognize the machine hazards and take all the necessary steps to protect yourself and co-workers.

FARM ACCIDENT PREVENTION DEPENDS UPON:

- A good knowledge of the hazards
- Keeping all guards and shields in place and well maintained.
- Heeding the warning decals that are, or are supposed to be, affixed to the equipment.
- Always disengage the power, shut off the engine, pocket the key, and wait for all moving parts to completely shut down before doing any kind of work on the machine.

RECOGNIZE COMMON EQUIPMENT HAZARDS:

There are many types of machines that do different kinds of work on a typical farm. But, major farm equipment hazards are common to all the different types of machines.

All farm workers should learn to recognize the following hazard points and take appropriate action to avoid accidental contact:

- **Pinch points** – These points occur when at least two parts move together, and at least one of them turns in a circle. Chain drives, belt drives, gear drives and feeder rolls are good examples of pinch points. Clothing, jewelry and even hair can get caught in one of these hazard points. Always avoids reaching in areas near a rotating part. A finger or fingers, hand or maybe a body part can be severed by a pinch point.
- **Pull-in accidents** – These types of accidents happen when one tries to unclog or feed material into a machine that is running. These parts operate so fast that you can lose an arm or hand so fast you may not realize how you did it.
- **Wrap points** – Any exposed shaft that is rotating constitutes a wrap point. You can catch a shirt sleeve or a loose pant leg in a wrap point, and there is no way to escape. Some good examples of wrap point's hazards are:
 - ~shaft ends protruding beyond bearings
 - ~splined, square and hex-shaped shafts are most likely to wrap hair or clothing. But remember that the smoothest shaft on machinery can grab and wrap.
 - ~couplings, u-joints, cotter keys, and other fasteners on shafts increase the wrapping hazard.
 - ~exposed beaters and pickup reels are also considered to be wrapping hazards.
- **Thrown objects** – There are some farm machines, such as rotary mowers and flail choppers that can throw rocks and debris a considerable distance with a good bit of force.

- **Shear points** – Shear points exist when two components move across each other, such as scissors. A cutting point is created when an object moves forcefully enough to cut relatively soft material. Shearing and cutting devices are used widely on harvesting equipment. The active parts may rotate like a rotary mower or reciprocate, like a sickle bar. Cutting and shear points also exist on machines that actually aren't designed to cut material. Think of an auger entering the tube with its tips touching or very close to touching the tube or a hinged implement frame.
- **Freewheeling** – Freewheeling parts may continue to rotate for several minutes or more after the engine is turned off or disengaged. Some examples of this motion are hammer mills, forage harvester cutter heads, baler flywheels, rotary mowers, and blower fans. The hazards exist when a person tries to unclog or service the equipment before the part has completely stopped.
- **Crush points** – Crush points occur when two objects move toward each other or when one object moves toward a stationary item. A crush point exists between an implement tongue and a tractor drawbar. Some other examples of crush points that we can identify with are jacked-up equipment raised hydraulic components, and overhead garage doors.

RECOGNITION-AVOIDANCE-PREVENTION:

To prevent farm equipment accidents, you first must learn to recognize the hazards that these machines present. Develop good safety habits to ensure that you have no contact with operating machinery:

- Never reach into any part of an operating machine. **ALWAYS disengage the power, shut off the engine, take out the key, and wait for all parts to stop moving before attempting to service or unplug equipment.**
- Make sure that all guards and shields are properly maintained and are in place. Replace any shielding that might have been removed for repairs.
- When hitching equipment, the helper should stand clear until the tractor is backed into position. When making adjustments for hitching, inch forward and not backward.
- Bystanders should be moved out of the immediate area to prevent the possibility of debris being thrown at them by the equipment.

It is critical for one to "THINK" about their actions before you take them. It is hardly possible for someone to let go of a corn stalk before it is suddenly pulled into a harvester feed roll or it isn't possible to react fast enough to get a shirt sleeve out of a PTO shaft. The simple "Golden Rule" is to never attempt to do any kind of work on equipment with the power engaged.