

Farm Machinery Safety

Without machinery it would be difficult to grind feed, move grain, chop hay, spread manure, and many more farm tasks. Each mechanism holds hazards as well as benefits. In order to be safe while using farm machinery two things must occur: good working equipment and an alert and safe operator.

While each individual farm machine performs a unique task, they all tend to function similarly. Some farm machines have many hazards while some may have only one hazard.



HAZARD	HAZARD DEFINITION	EXAMPLE
Shear & cutting edges	Two objects moving together to cut material or a sharp object moving fast	Shears or rotary blades on a mower
Pinch points	Two objects moving together with at least one moving in a circle	Belt and pulley, chain drives, and gear drives
Wrap points	Rotating shaft or exposed machinery that can catch a person or his/her clothing	Power take off shaft
Crush points	Two objects moving toward each other or one object moving toward a stationary object	Hitching up an implement with a tractor or a falling heavy object
Pull-in points	Person caught in feed mechanisms	Combine head where plant material enters
Thrown objects	Spinning mechanisms that continue even after the machine is shut off	Mower rotary blades, fans, flywheels
Springs (Stored energy)	Compression mechanisms used as shock absorbers or to keep items tight which release extreme force when released	Bungee cords used to tie down tarps; Springs under tractor seat
Hydraulic systems (Stored energy)	Pressurized energy used to lift attachments, operate motors, and assist steering and braking – stored pressure can cause oil to be injected in body tissue	Hydraulic hose between tractor and operating PTO



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Preventing Farm Machinery Related Injuries

HAZARD	MACHINERY RELATED TACTICS	OPERATOR RELATED TACTICS
Shear & cutting edges	Shield and guard sharp edges	Shut down motor before cleaning or working on blades
Pinch points	Shield and/or guard pinch point areas	Wear tight fitting garments and gloves
Wrap points	Guard wrap point areas including protruding bearings and universal joints	Do not wear loose clothing and restrain long hair
Crush points	Put machine in park before hitching implements and use blocks when working	Wait until tractor is stopped before stepping into hitching area and signal others when it is safe
Pull-in points	Keep feed rolls and other machinery parts in good working condition	Shut off power before attempting to clear plugged equipment and use lockout/tag out when appropriate
Thrown objects	Cover blades and wait two minutes so blades stop before working on machine	Prevent other people from being in area where machine is operated and wear safety glasses, long pants, shirts, and covered shoes
Springs (Stored energy)	Examine spring before attaching for weak areas	Take care when releasing spring so it does not hit you or other people in vicinity
Hydraulic systems (Stored energy)	Ensure all lines and fittings are in good condition, replace those needing repair	Use cardboard or mirrors when checking for leaks on a regular basis - never use your hands.

Just as the machinery holds danger to those working with it, other family members especially children may be hurt if they come in contact with these powerful and fast machinery. It only takes a fraction of a second to get caught.

