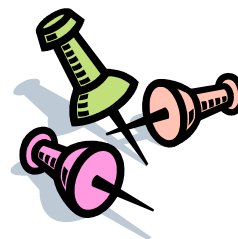




# Safety Note

UNIVERSITY OF CALIFORNIA  
AGRICULTURE AND NATURAL RESOURCES  
ENVIRONMENTAL HEALTH AND SAFETY



Safety Note #64

## FARM MACHINERY HAZARD AWARENESS



Photograph Courtesy of  
Intermountain REC

According to information available from the National Institute for Occupational Safety and Health (NIOSH), approximately 25 percent of lost-time injuries on farms are caused by machinery, including tractors. NIOSH data also indicate the leading types of lost-time injuries are sprains and strains, followed by fractures, lacerations, and bruises. California Code of Regulations Title 8, Section 3203 requires employees be informed and trained about farm machinery hazards in order to reduce the potential for injuries. **Videos E-006 and S-006 Working with Machinery are available from the ANR Environmental Health and Safety Library at**

<http://safety.ucanr.org>.

### Six Common Farm Machinery Hazards

1. Wrap Points – created by exposed and rotating shafts such as unguarded power take-offs. Safety Note #11 discusses power take-off safety precautions.
2. Hydraulic Systems – high-pressure farm machinery systems that store and discharge significant energy. Safety Note #16 discusses hydraulic systems safety precautions.
3. Pinch Points – created by gears, sprockets, sprocket chain drives, belt and pulley drives, and feed rolls. Safety Note #22 discusses pinch point safety precautions.
4. Shear and Cutting Points – created by sickle bars, rotary blades, flail blades, forage harvester heads, and grain augers. Safety Note #33 discusses shear and cutting point safety precautions.
5. Crush Points – created by two machinery parts moving toward each other or when a piece of machinery moves toward something stationary.
6. Thrown Objects – caused by powered farm machinery and includes ejected or propelled stones, sticks, dirt, straw, chaff, chopped stalks, and other objects.

### Safety Precautions for Working Around Farm Machinery Hazards

- Always be aware of farm machinery hazards in the work environment.
- Do not wear loose clothing or jewelry in the vicinity of farm machinery hazards. Tie back long hair or wear under a cap.
- As necessary, wear eye, hearing, and respiratory protection when using farm machinery.
- Prior to use, assure all covers, shields, and guards for farm machinery hazards are in place.
- Never reach or step across rotating mechanical parts. Keep extremities clear of operating mechanical parts.
- Be alert whenever you place your body or extremities between farm machinery and other objects.
- Never walk or stand behind operating farm machinery, particularly where crop waste discharges from spreaders or other chutes.
- Always shut the engine off, set the parking brake, and completely de-energize farm machinery before performing repairs, service, and adjustments or cleaning or unclogging mechanical parts.