University of **California** Agriculture and Natural Resources Risk & Safety Services

Safety Note #104

PREVENTING WORKPLACE AMPUTATIONS



Commercial Potato Seed Cutter Photograph Courtesy Intermountain REC

Information available from the Bureau of Labor Statistics indicates approximately 2,700 amputations were associated with agricultural operations between 1992 and 1999. Moreover, 37 of these amputations resulted in fatalities.

Most amputations are caused when workers are inattentive and operate machinery, tools, or equipment with hazardous mechanical components that are unguarded or not properly guarded. *Video E-079 Machine Guarding is available from the ANR Environmental Health and Safety*

Library at <u>http://safety.ucanr.org</u>.

Common Agricultural Amputation Hazards

- Rotating mechanical devices such clutches, flywheels, sprockets, spindles, pick-up reels, belt and pulley drives, augers, gears, sprocket chain drives, pressure rollers, and shafts can catch loose clothing or hair and trap or force limbs or other body parts into or onto moving or immobile components and cause amputations.
- Cutting mechanical devices such as rotating mowing and cutter heads, reciprocating sickle bars, or combine head cutter knives are capable of amputating body parts upon contact.

Precautions for Preventing Agricultural Amputations

- Employees shall receive training that encompasses their work task processes and procedures and hazards present in their work area.
- Employees shall identify and be aware of work area mechanical hazards and types of tasks being performed that have the potential for causing workplace amputations.
- Upon acquisition, equipment, tools, and machinery shall be inspected to locate potential hazardous rotating or cutting mechanical components. The inspection shall be performed by an experienced mechanic and identify any areas where guarding or shields are lacking. If guarding or shields are lacking, they shall be purchased or fabricated and installed.
- Prior to use, employees shall inspect equipment, tools, and machinery to assure all guards and shields are in place and undamaged.
- Always keep yourself, limbs, and fingers a safe distance from moving mechanical components.
- Disconnect power sources to equipment and tools or shut off machinery and deenergize hydraulic or other systems before making adjustments, performing maintenance, or unclogging mechanical components.
- Whenever possible, use tools rather than fingers to adjust, maintain, or unclog mechanical components.
- Never work or reach beneath hydraulically raised components unless safety latches are in place or the components are properly blocked.

Additional information about mechanical hazards associated with agricultural machinery, equipment, and tools is given in Safety Note #11 Power Take-Off Safety, Safety Note #22 Pinch Point Hazards, Safety Note #33 Shear and Cutting Point Hazards, and Safety Note #64 Farm Machinery Hazard Awareness.