

Safety Note

UNIVERSITY OF CALIFORNIA AGRICULTURE AND NATURAL RESOURCES ENVIRONMENTAL HEALTH AND SAFETY



Safety Note #33

SHEAR AND CUTTING POINT HAZARDS



Combine Sickle Bar Cutting Point Photograph Courtesy of Intermountain REC

When two mechanical parts move close enough together to process crop material such as in a grain auger, a shear point hazard is created. Similarly, when a mechanical part moves rapidly or forcefully enough to cut plant material such as wheat, a cutting point is created. Agricultural equipment and machinery often have shear or cutting point hazards including sickle bars, rotary blades, flail blades, and auger blades. California Code of Regulations (CCR) addresses shear and cutting points under Title 8, Sections 3440, 3441, 3445, and 4002.

General Shear or Cutting Point Information

- Types of shear or cutting point injuries include amputations, lacerations, contusions, crushing of tissues and bones, and broken bones.
- Shearing or cutting mechanical parts move too fast for you to escape injury once one of your body parts has been exposed to a shear or cutting point hazard.

Shear or Cutting Point Safety Precautions

- Always be aware of shear or cutting points that are present in your work environment, including those associated with equipment or machinery you may use or work with and/or near.
- Prior to use, assure all covers and protective shields for equipment and machinery shear or cutting point hazards are in place.
- Loose clothing, jewelry, and hair can be pulled into shear or cutting points. Accordingly, wear snug clothing, remove jewelry, and tie long hair back or secure under a cap before working in the vicinity of shear or cutting point hazards.
- Place and maintain warning labels adjacent to shear or cutting point hazards.
- Never place your hands, fingers, or feet near or reach across shear or cutting parts.
- Do not operate equipment or machinery without required guards or shields.
- Shut off engine, de-energize equipment or machinery, and engage parking brake (or set wheel chock blocks) before performing maintenance or repairs or when unclogging plant material from shear or cutting points.
- Always replace guards or shields after completing equipment and machinery maintenance or repairs.



Grain Auger Shear Point Photograph Courtesy of UC Davis