

# Farm and Ranch Safety Audit

Cooperative Extension Service  
College of Agriculture and  
Home Economics



## Guide M-117

Craig Runyan, Extension Farm Safety Coordinator

This publication is scheduled to be updated and reissued 9/04.

This safety audit is designed to guide you in spotting and correcting hazardous situations on your farm or ranch operation before they cause accidents. Because it is intended for general use, it does not cover special situations. Where this audit is inadequate, operators are encouraged to find or develop safety inspection information specific to their operations. Such information can be found from equipment dealers, builders, safety organizations, or government agencies. New Mexico State University's Cooperative Extension Service will assist operators of specialized operations in developing additional inspection check lists.

For a safety audit to be meaningful, you and your employees must be committed to correcting the hazards that are identified. If a situation cannot be corrected immediately, a temporary action should be considered, such as restricting those who will be allowed to work in or with the existing hazard.

### WHO SHOULD CONDUCT THE SAFETY AUDIT?

While performing a safety audit, managers should include family members and employees in identifying and correcting potential hazards. Recognizing and avoiding hazards contributes greatly to reducing accidents. Results of the safety audit should be discussed with workers and family members who could be affected.

### WHEN TO INSPECT

Each area should be inspected annually, but not necessarily all at the same time. Most locations on the farm or ranch—such as workshops, barns, and other structures—can be inspected at any time during the year.

Other areas, for example machinery or livestock working facilities, might best be inspected when preparing for the seasonal use of the machinery or equipment. Both a static (at rest) and an operational inspection

should be completed. The static inspection should include shields, guards, and decals. An operational inspection should include field performance, operator performance, and any hazards in the surroundings in which the equipment is operated (such as ditches, culverts, and field obstructions).

### HOW TO COMPLETE THE SAFETY AUDIT

As you inspect the various areas of your farm or ranch, answer the questions by checking YES or NO. If you answer YES to a question, no further action is necessary. If you answer NO, a hazard exists that requires correction. Determine the level of risk the hazard presents. Higher risk situations should be given the highest priority when taking corrective action.

- ◆ *Major.* Potential for life-threatening or serious injury; requires immediate corrective action.
- ◆ *Serious.* Injury or property damage possible; requires corrective action in the short-term.
- ◆ *Minor.* Not likely to cause significant injury or property loss; implement long-term corrective action during off-season or down time.

Be realistic in your ranking and timing of corrective actions. Once a hazard has been corrected, check it off in the right-hand column.

### RECORD KEEPING

When safety audits are conducted properly and corrective actions are taken in reasonable time, records of audits will provide managers with accurate information on their commitment to operating a safe workplace. Safety audit records can also be useful in revealing recurring hazards that may require alternate solutions. Perhaps more important, if an accident does occur, records can help determine the cause (such as human error, faulty equipment, or unsafe conditions) and what decisions should be made to avoid similar accidents in the future.

To find more resources for your business, home, or family, visit the College of Agriculture and Home Economics on the World Wide Web at <http://www.cahe.nmsu.edu>

<b>BUILDING SAFETY</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Are buildings free of litter and debris?				
• Are walkways, aisles, and traffic areas clear of obstructions?				
• Is there adequate lighting in work and travel areas?				
• Are stairs in good condition and equipped with handrails?				
• Are stairs kept clear of obstacles on steps and landings?				
• Are permanent ladders in good condition and inspected regularly?				
• Has broken or damaged flooring been repaired?				
• Are low features, such as beams and rafters, clearly marked?				
• Are stored materials properly stacked to prevent them from falling?				
• Have protrusions such as nails been removed?				
• Are nails removed from used lumber before stacking?				
• Do you wipe up spills immediately?				
• Is there ample walking space between stored machines?				
• Are keys removed from stored machines?				
• Do large doors open smoothly?				
• Do you park your tractors and other fuel-burning equipment a safe distance from the barn, shop, or other buildings?				
• Do you store flammable chemicals such as paints and solvents in a dedicated storage?				

<b>FIRE PREVENTION</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• In fire hazard areas, are NO SMOKING signs placed in prominent locations?				
• Are light bulbs and heat lamps protected with wire guards?				
• Are lightning rods checked for proper installation and grounding?				
• Are fire department numbers and farm location prominently displayed by all phones?				
• Are appropriate fire extinguishers located strategically for easy access in case of fire?				
• Are fire extinguishers inspected regularly?				
• Are doors and gate latches easy to open?				
• Are faulty wiring and electrical equipment repaired or replaced immediately?				

<b>FIRE PREVENTION (Cont.)</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Does your family periodically review how to operate fire extinguishers and discuss emergency plans?				
• Do you regularly dispose of rubbish and other combustibles?				
• Are flammable liquids properly stored away from any ignition sources?				
• Do you take care not to damage concealed electrical wiring when drilling holes or driving nails into walls?				
• Are matches and lighters stored safely and out of reach of children?				
• Are space heaters clean and in good condition?				

<b>WORKSHOP</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Are all electrical outlets in the shop properly grounded with ground fault circuit interrupters?				
• Are floors kept dry at all times?				
• Is personal protective equipment (such as goggles, face shields, and hard hats) available?				
• Is a stocked first-aid kit available?				
• Are work areas free of debris and clutter?				
• Is there adequate lighting to prevent working in shadows?				
• Are suitable receptacles available for oily rags, used oil, etc.?				
• Are there at least two exits?				
• Is adequate, well-organized storage available for tools and equipment?				
• Are extension cords used only for temporary work?				
• Are portable lights properly shielded to prevent breakage?				
• Are portable tools unplugged when not in use?				
• Are benches tidy and drawers kept shut?				

<b>ELECTRICAL SAFETY</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Are power lines, poles, and other electrical hardware coming into the farm in good repair?				
• Have trees been trimmed well away from conductors in case of storms?				
• Are overhead lines kept out of vehicle traffic areas to avoid contact with high vehicles in the farm yard?				
• Do all outlets have three-pronged receptacles to provide proper grounding of electrical tools and appliances?				
• Are there sufficient outlets to eliminate the continued use of extension cords?				
• Are bare light bulbs protected from being hit by objects and machines or splashed with liquid?				
• Are outside outlets weatherproof and installed with ground fault circuit interrupters?				
• Are antennas located far enough from wires in case of falls during a storm?				
• Do you have warning systems to indicate that vital equipment has failed?				
• Do livestock ever act wary or refuse to drink?				
• Do you unplug tools and equipment that are not being used?				
• Are checks always made for underground wiring before digging?				
• Are fuses and switches all labeled properly so as to prevent confusion in an emergency?				

<b>FIELDS, WOODLOTS, LANES, DRIVES, AND YARDS</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Along ditches and embankments, do you leave a sufficient turning area for machinery?				
• Are washouts repaired and filled so vehicles won't get stuck?				
• Do you trim low tree branches that could hit equipment?				
• If underground utilities (such as gas and power lines) cross your farm, are they well-marked?				
• Are all gates (yard and field) wide enough for machinery and trucks to enter and exit easily?				
• Are workers made aware of overhead power lines when moving tall equipment, ladders, etc.?				
• Is equipment kept off steep slopes where stability can be uncertain?				
• Are sidewalks and walkways in good repair?				

<b>FIELDS, WOODLOTS, LANES, DRIVES, AND YARDS (Cont.)</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Are lawn and garden tools put away after use?				
• Is the yard clear of rubbish, dead vegetation, mislaid tools?				
• Is there protection from the danger of uncovered water sources such as tanks, wells, and cisterns?				
• Do you inspect trees after storms and in the spring for broken limbs that could come down?				
• Do you have an assigned play area for children (such as a fenced area)?				
• Do you check for nests of stinging insects and take appropriate action for their removal?				
• Are clotheslines high enough for pedestrians to walk under?				

<b>FARM TRACTOR SAFETY</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Do you read the operator’s manual for your farm tractor and follow the operating, maintenance, and safety recommendations found therein?				
• Before operating, do you walk around the tractor, making a visual check for bystanders and other objects?				
• Is the tractor equipped with a rollover protective structure (ROPS) and seat belts?				
• Do you always wear seat belts with ROPS?				
• Do you enforce the rule “NO RIDERS ON THE TRACTOR AT ANY TIME”?				
• Is there an SMV (slow moving vehicle) sign on the rear of the tractor or towed equipment for roadway travel?				
• Is the SMV sign clean, with good reflective qualities?				
• Do you lock brake pedals together before roadway travel?				
• When towing equipment, do you use safety hitch pins and chains?				
• Is a first-aid kit mounted on the tractor?				
• Is a fire extinguisher located on the tractor?				
• When operating a tractor in buildings, do you open doors and windows or start ventilation fans?				
• Are steps free of mud, tools, or debris that could cause slips?				
• Are keys removed from the tractor when not use to prevent theft or unauthorized people from using the equipment?				

<b>FARM TRACTOR SAFETY (Cont.)</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Do you always steer clear of hazards soon as ditches, steep hills, and other areas where tractors can tip?				
• When using front-end loaders, do you travel with the bucket lowered to avoid tipping sideways?				
• Have all tractor operators on you farm received training on their equipment and reviewed the operator's manual?				
• Do your tractor operators always do a pre-operational check that includes a walk around the equipment to check lights, visibility, tires, brakes, etc.?				
• Is mounted equipment always lowered before the operator leaves the tractor?				
• Are towed loads always hitched to the drawbar, and never higher?				
• When towing high loads, are clearances from overhead power lines always checked?				
• Is the exhaust system on each tractor in good condition and leak-free?				
• Are brakes adjusted regularly?				

<b>PTO-DRIVEN EQUIPMENT</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Do all PTOs have shields and guards in place?				
• Is there a master shield in place where your PTO meets the tractor?				
• Are shields on PTOs checked periodically to ensure that they rotate freely? (Check only with power off.)				
• Before operators leave the tractor seat, do they always disengage the PTO, shut off the engine, and remove the keys?				
• When working with PTO-driven equipment, is clothing close-fitting, long hair covered, and no laces or loose items exposed?				
• Do you always avoid stepping over a PTO shaft?				
• Are worn or defective parts replaced as soon as possible?				

<b>GENERAL FARM MACHINERY</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Are key warning decals on machines readable?				
• Are all shields and guards in place?				
• Are all machines free of jagged metal or protrusions that could injure workers?				
• Are hydraulic lines free of excessive wear or leaks? (Do not check hydraulic hoses for leaks with you hands, as fluid under pressure can be injected into human tissue. Use cardboard or wood to detect leaks.)				
• Are defective and worn parts replaced as soon as possible on all machinery?				
• Are tires inspected regularly and properly inflated?				
• Are children and bystanders kept away from operating machinery?				
• Is the power turned off before adjusting or servicing machinery?				
• Are farm equipment manuals readily available to the operator?				
• Is any equipment that is likely to be towed on roadways equipped with a slow-moving vehicle sign, safety chains, and a safety hitch pin?				
• Are SMV signs in good condition (clean and not faded)?				
• Are moveable components properly blocked before repair or adjustments?				
• Do you always observe the “NO RIDERS” rule on machines or drawbars?				
• Are brakes adjusted regularly?				

<b>PESTICIDE STORAGE</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Is your pesticide storage area used exclusively for the storage of pesticides?				
• Is this storage area kept neat and orderly?				
• Is the storage area vented to the outside?				
• Have you posted a chemical warning sign on all entrances to the storage area?				
• Do you have adequate safety equipment (respirator, rubber gloves, boots, etc.)?				
• Have you posted emergency phone numbers (such as fire and the New Mexico Department of Agriculture)?				
• Is the storage area free of floor drains?				

*Note: For more information on pesticide storage and handling, see chapter 2 of New Mexico Farm\* A \*Syst.*

<b>ANIMAL HANDLING FACILITIES</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Are facility steps and walkways roughened to prevent slips and falls?				
• Are walkways and aisles kept free of debris, manure, feed?				
• Are outside ramps, steps, and entrance ways protected from rain or spilled liquids that could freeze?				
• Are animal drugs and barn chemicals kept in a secure area in original containers?				
• Are pens, gates, and fences in good condition, without protrusions?				
• Are heaters kept away from combustible materials?				
• Do you use special care in handling animals with new-born young?				
• Do you make animals aware of your approach so as not to frighten them?				
• Do you wear protective footwear and head protection when handling animals?				
• Do you leave yourself an "out" when working in close quarters with animals?				
• Are pets and animals immunized as required?				

<b>LADDER SAFETY</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Are ladders inspected before each use, and replaced or repaired immediately if found faulty?				
• Are wooden ladders coated with clear preservatives so that faults or cracks are visible?				
• Are metal ladders free of weld cracks, missing rivets, etc.?				
• Are the feet of the ladder in good condition?				
• Do you face the ladder when climbing up or down or when working from the ladder?				
• Are areas around the top and bottom of the ladder clear of obstruction or debris?				
• Are straight ladders placed at a four-to-one angle (the base set 1 foot out for every 4 feet up)?				
• Are metal ladders avoided where electrical contact is possible from overhead wires?				
• When using a ladder, does it extend at least 3 feet above from landing level?				
• Have you replaced any missing or damaged rungs on the ladder?				
• Are two people involved when moving or erecting long ladders?				

<b>LADDER SAFETY (Cont.)</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Do you store ladders where they cannot be damaged?				
• Do you always put a ladder on firm footing or compacted soil?				
• Is work with ladders avoided in windy or stormy conditions?				
• When working from a ladder, do you always keep the trunk of your body centered within the ladder rails?				

<b>SAFE LIFTING AND MATERIALS HANDLING</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Has everyone on your farm received instruction on safe lifting techniques?				
• Is the “bend your knees” rule always followed?				
• Is appropriate protective equipment (such as steel-toed boots and gloves) worn when lifting and handling materials?				
• Are two people or mechanical means used to move heavy loads?				
• Do you check for a clear pathway before lifting and moving objects?				

<b>FIRST AID/EMERGENCY ACTION</b>	<b>Yes</b>	<b>No</b>	<b>Level of Priority</b>	<b>Hazard Corrected</b>
• Do you maintain first-aid kits in the following locations:				
◆ Home?				
◆ Workshop?				
◆ Tractors?				
◆ Vehicles?				
• Are first-aid kits periodically checked and replenished?				
• Has anyone on your farm received first-aid training in the last 3 years?				
• Has anyone on your farm received training in CPR (cardiopulmonary resuscitation)?				





New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.

---

**Reprinted June 2003**

**Las Cruces, NM**  
3C