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*Appendix*

# Farm & Ranch Safety Inventory

## Editor's Note

This “Farm & Ranch Safety Inventory” is included in the *Leader's Guide* for your information in case you would like to incorporate a discussion of conducting a safety inventory in a workshop. You are free to reproduce the inventory for use in your program, or bulk copies can be obtained for a small charge from the Agricultural Safety and Health Program, 1146 AGEN, Purdue University, West Lafayette, IN 47907-1146.

## Introduction

The typical farmstead contains dozens of hazards or dangers. Too often, we may take a hazardous situation for granted because “that’s just the way it’s always been.” Or we simply may not recognize potential hazards. A common example of an “unrecognized hazard” is a large tractor tire leaning against the side of a building. There have been several cases of small children being injured or killed while playing or hiding behind leaning tires.

How do we proceed to eliminate potential hazards? First and foremost, we must identify the hazards. The following “Farm & Ranch Safety Inventory” was designed by Extension safety specialists at Purdue University to help reveal potential hazards on your farm. Completing the inventory will help identify many hazards that could be a source of injury to you or members of your family.

## Completing the Inventory

To be most successful, you should set aside 2 to 3 hours when the whole family can participate in this “hazard hunt.” Youth will enjoy this activity, and can always be counted on to provide unique perspectives and opinions. The inventory is divided into sections representing various areas or activities on the farm, allowing a systematic approach to the activity. One family member should be designated as the “clerk” to make note of hazards that are found. If possible, photocopy the inventory and give copies to your family members, or discuss the inventory beforehand to allow your family to get an idea of what to look for during the search. As you complete the inventory, check the “OK” box for each item you find acceptable. If a listed item is not applicable, write “NA” as the potential hazard. If you find one of the potential hazards listed on the form (and you will most likely find many), describe the problem in the space provided.

It is a good idea to bring some extra sheets of paper to record items that might not be listed on the form. Although the inventory covers a wide variety of potential hazards, there is no way to anticipate every possibility. You might be able to photograph the more serious hazards and paste them on your refrigerator as a reminder to correct them.

## **Organizing Your Findings**

Don't be discouraged as you complete the inventory. You could find dozens of problems. Record everything you find, no matter how large or small the problem. Remember, the purpose here is to locate as many hazards as possible. We must first recognize a problem before we can find a solution.

Once you and your family have completed the inventory, you will probably have identified a long list of potential hazards, and be wondering "OK, now what?" Begin the "analysis" part of this exercise by using the included form to rewrite your list of potential hazards.

Once you have rewritten your list of hazards, you can begin to formulate solutions. Be practical when developing these solutions. For example you will probably be more inclined to apply some fluorescent tape and a warning sign above a low-clearance doorway than you will be to tear out the door and make it taller. Also keep in mind that there will be some hazards that will never be completely eliminated. Do your best to devise solutions that will minimize the risk to you, your family, and your employees.

## **Categorizing Your Solutions**

Now that you have a list of problems and solutions, you should begin to categorize your solutions. Most likely, the major considerations in implementing your solutions will be the expense and "hardship" involved. Using your list of problems and solutions, rank each as Easy (E), Moderate (M), or Difficult (D) to accomplish.

## **Prioritizing Your Solutions**

After categorizing your solutions according to difficulty or expense, enter each on the appropriate forms (extra forms may be needed). For each list, determine which of the solutions is most important. Situations presenting serious risk of injury to your family should be given the highest priority. Rank each solution as High (H), Medium (M), or Low (L) priority. Then assign a target date for implementing solutions that eliminate or minimize the hazard.

Reducing hazards on your farm will not be an overnight process. Take time to develop solutions and set target dates that are realistic. For simple tasks, or particularly hazardous situations, such as a missing PTO guard, set a completion date in the near future and get the problem solved. Other solutions, especially very expensive ones or those requiring significant changes to the farmstead, may have a target completion date that is months or even years in the future.



## Farm & Ranch Safety Inventory

Name of Farm \_\_\_\_\_

Date Evaluated \_\_\_\_\_

### Farmstead and Buildings

**OK**

**Corrective Actions Needed**

Farmstead and buildings free of trash, debris, or junk which could cause falls or be a fire hazard.

\_\_\_\_\_

Buildings, outdoor work areas are well lighted.

\_\_\_\_\_

Above ground fuel tanks are at least 40 feet from any building.

\_\_\_\_\_

“NO SMOKING” signs are displayed near fuel storage and refueling areas.

\_\_\_\_\_

Weeds and other easily combustible materials are kept away from fuel storage areas.

\_\_\_\_\_

Telephones are located in each major farm building.

\_\_\_\_\_

Emergency phone numbers are clearly posted.

\_\_\_\_\_

Fully charged ABC fire extinguisher is located in each farm building.

\_\_\_\_\_

Well maintained first aid kit is located in each major farm building.

\_\_\_\_\_

Electrical wiring is in good condition, supported in conduit.

\_\_\_\_\_

Wiring insulation is in good condition, not cracked, broken, or brittle.

\_\_\_\_\_

Electric outlets are 3-prong grounded type.

\_\_\_\_\_

Stairs, ladders are in good condition.

\_\_\_\_\_

Stairs are clear of objects and slippery substances, and have handrails.

\_\_\_\_\_

Floors are free of broken concrete, slickspots, or bad spots which could cause falls.

\_\_\_\_\_

### Crop and Feed Storage Areas

**OK**      **Corrective Actions Needed**

Entrances to grain, feed, or silage storage areas can be secured.

\_\_\_\_\_

Flowing grain hazard warnings are posted at storage facilities.

\_\_\_\_\_

Silo and bin ladders are in good condition.

\_\_\_\_\_

All bins have both inside and outside ladders.

\_\_\_\_\_

Fully charged ABC type fire extinguisher is available in crop storage area.

\_\_\_\_\_

Approved respirators are available when handling dusty grain or feed, or cleaning bin.

\_\_\_\_\_

Warnings concerning dangers of silo gas are posted.

\_\_\_\_\_

Storage and drying area free of trash or other fire hazards.

\_\_\_\_\_

Electric motors are placed in areas with adequate ventilation, and free of trash or other fire hazard.

\_\_\_\_\_

Overhead power lines are located away from bins

\_\_\_\_\_

### Chemical Storage Areas

Crop chemicals are stored in a secured room or building to keep out children and animals.

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Chemical storage area entrance clearly marked and posted concerning hazards inside.

\_\_\_\_\_

Chemicals stored in labeled, original containers.

\_\_\_\_\_

Chemical containers are properly disposed.

\_\_\_\_\_

Smoking is prohibited in and around chemical storage buildings and "NO SMOKING" signs posted.

\_\_\_\_\_

<b>Tractors</b>	<b>OK</b>	<b>Corrective Actions Needed</b>
All PTO master shields are in place.	<input type="checkbox"/>	_____
Reflectors, SMV emblems are clean and unfaded.	<input type="checkbox"/>	_____
Tractors are equipped with ROP's.	<input type="checkbox"/>	_____
ROP's equipped tractors have seat belts.	<input type="checkbox"/>	_____
Five pound (minimum) ABC type fire extinguisher is mounted on each tractor.	<input type="checkbox"/>	_____
All lights and flashers are in working order.	<input type="checkbox"/>	_____
Cab windows and mirrors are clean to maintain good visibility.	<input type="checkbox"/>	_____
Operator's platform is kept clear of grease, mud, and tools.	<input type="checkbox"/>	_____
Fuel, oil, and hydraulic systems are free of leaks, and are maintained at proper fluid levels.	<input type="checkbox"/>	_____
Tires are in good condition and kept at recommended pressure.	<input type="checkbox"/>	_____
Muffler and exhaust system is properly maintained.	<input type="checkbox"/>	_____
Each tractor is equipped with a No Rider decal.	<input type="checkbox"/>	_____
<b>Tillage/Planting Equipment</b>		
Equipment is marked with reflectors and lights for highway travel.	<input type="checkbox"/>	_____
Belts, chains, and shafts are adequately shielded.	<input type="checkbox"/>	_____
PTO components are properly shielded.	<input type="checkbox"/>	_____
Hydraulic components appear in good shape and free of leaks.	<input type="checkbox"/>	_____
Hydraulically raised equipment has transport locks to take load off hydraulic system during transport.	<input type="checkbox"/>	_____
Tires are inflated to recommended pressure.	<input type="checkbox"/>	_____

	<b>OK</b>	<b>Corrective Actions Needed</b>
<b>Wagons &amp; Hauling Equipment</b>		
Lights and reflectors are in place and working.	<input type="checkbox"/>	_____
Belts, pulleys, shafts, chains are properly shielded.	<input type="checkbox"/>	_____
Each piece of equipment has clean, unfaded SMV emblem.	<input type="checkbox"/>	_____
Tires appear to be in good condition and properly inflated.	<input type="checkbox"/>	_____
Wheel lugs are in place and tightened.	<input type="checkbox"/>	_____
Safety hitch pins are used.	<input type="checkbox"/>	_____
<b>Harvesting Equipment</b>		
Guards and shields are in place.	<input type="checkbox"/>	_____
Ladders and steps are in good repair.	<input type="checkbox"/>	_____
Each machine is equipped with an SMV emblem.	<input type="checkbox"/>	_____
Combine equipped with at least 10 pound ABC type fire extinguisher.	<input type="checkbox"/>	_____
Operator's manual is in cab for reference when making adjustments.	<input type="checkbox"/>	_____
Fuel, oil, and hydraulic system is free of leaks.	<input type="checkbox"/>	_____
Belts and chains are properly adjusted.	<input type="checkbox"/>	_____
Safety latch, jack stand, and/or safety locks are in working order.	<input type="checkbox"/>	_____
Flashers and lights are working.	<input type="checkbox"/>	_____
For PTO operated machines, PTO components are properly shielded.	<input type="checkbox"/>	_____

	<b>OK</b>	<b>Corrective Actions Needed</b>
<b>Chemical Application Equipment</b>		
Necessary personal protective equipment (gloves, goggles, etc.) is available for each applicator.	<input type="checkbox"/>	_____
Fittings, hoses, and lines are in good condition and free of leaks.	<input type="checkbox"/>	_____
Control valves work easily by hand without leakage.	<input type="checkbox"/>	_____
All pressure gauges read accurately.	<input type="checkbox"/>	_____
Sprayer tank covers fit snugly to prevent spillage.	<input type="checkbox"/>	_____
On PTO-driven applicators, driveline components are properly shielded.	<input type="checkbox"/>	_____
 <b>Anhydrous Ammonia Application Equipment</b>		
Valves and fittings are in good repair.	<input type="checkbox"/>	_____
Worn hoses are replaced promptly.	<input type="checkbox"/>	_____
Rubber gloves and splash goggles are available for use with each applicator.	<input type="checkbox"/>	_____
Each nurse tank or applicator has five gallons of fresh water mounted on it (as required by law).	<input type="checkbox"/>	_____
Nurse tanks or applicators moved on public highways are equipped with SMV emblems.	<input type="checkbox"/>	_____
Tires and running gears on nurse tanks are in good condition.	<input type="checkbox"/>	_____

**OK      Corrective Actions Needed**

**Livestock Facilities**

Doorways and aisles are free of obstructions and sharp projections.

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Ceilings are 8 - 12 feet and door frames are at least 8 ft. high with a minimum width of 4 feet.

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Windows are inaccessible to horses and livestock, covered with bars or screening and made of safety glass.

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Water sources are grounded to prevent accidental electrical shock.

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Cross-ties and other tying areas with safety release snaps are provided.

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Grooming and wash stalls are in open areas; clean and well-drained to prevent wet and/or icy barn floors.

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Hay is stored away from heat and electrical sources, and in a separate building from where livestock and horses are housed.

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Hay and bedding are stacked so as not to fall on top of anyone.

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Tack rooms have adequate racks and storage areas to keep equipment off the floor and out of the path of traffic.

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Turnout paddocks and pasture fencing is 4 - 6 feet in height and free of protrusions.

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Gates are at least 4 feet wide, swing freely and have no sharp edges or corners.

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Ponds, irrigation and open drainage ditches are fenced.

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**Personal Protective Equipment**

**OK      Corrective Actions Needed**

Safety glasses available at all grinders and other sources of eye hazards.

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Arc welding helmets and welding goggles are in good condition and fitted with the appropriate lenses.

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Respirators are available for dusty tasks such as sanding.

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Face shields are available for every power tool.

\_\_\_\_\_

Hard hats are available for construction activities.

\_\_\_\_\_

Wash-up area provided.

\_\_\_\_\_

First aid kit available and maintained.

\_\_\_\_\_

**Shop**

All fuses and circuit breakers are clearly identified.

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Floors are clean and free of grease and tripping hazards.

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No flammable waste.

\_\_\_\_\_

Air used for cleaning is regulated to not more than 35 psi.

\_\_\_\_\_

Stacked materials secured against falling.

\_\_\_\_\_

Adequate ventilation is provided.

\_\_\_\_\_

Load capacity plainly marked on each lifting device.

\_\_\_\_\_

Safety hooks used on all chains.

\_\_\_\_\_

Jack stands available. (no concrete blocks)

\_\_\_\_\_

	<b>OK</b>	<b>Corrective Actions Needed</b>
<b>Shop Tools</b>		
All hammer handles in good condition.	<input type="checkbox"/>	_____
Punches and chisels in good condition. (no mushroomed heads)	<input type="checkbox"/>	_____
Tools free of grease and oil.	<input type="checkbox"/>	_____
Cutting tools are sharp.	<input type="checkbox"/>	_____
All stationary power tools are secured to the floor.	<input type="checkbox"/>	_____
All stationary power tools and equipment are grounded.	<input type="checkbox"/>	_____
Table saw equipped with guard and push stick available.	<input type="checkbox"/>	_____
Grinders have guards and properly adjusted work rests.	<input type="checkbox"/>	_____
Battery charging area away from welding area.	<input type="checkbox"/>	_____
All belts, pulleys, and chains guarded.	<input type="checkbox"/>	_____
Extension cords and portable power tool cords are in good condition.	<input type="checkbox"/>	_____
Welding area kept dry.	<input type="checkbox"/>	_____
Compressed gas cylinders are secured in place.	<input type="checkbox"/>	_____
Cylinders turned off when not in use.	<input type="checkbox"/>	_____
Arc welding cables in good condition.	<input type="checkbox"/>	_____
Ventilation adequate to dissipate welding fumes.	<input type="checkbox"/>	_____

	<b>OK</b>	<b>Corrective Actions Needed</b>
<b>Portable Augers and Elevators</b>		
All belts and chains are properly shielded.	<input type="checkbox"/>	_____
Auger inlet is shielded to prevent contact with flighting.	<input type="checkbox"/>	_____
Winch is in good working order and equipped to prevent "freewheeling".	<input type="checkbox"/>	_____
Winch cable is free of corrosion or damage.	<input type="checkbox"/>	_____
PTO operated components are properly shielded.	<input type="checkbox"/>	_____
No overhead power lines are located near where portable augers or elevators are commonly used.	<input type="checkbox"/>	_____

**Fields and Roadways**

Fields are free of stumps, large rocks, or other obstacles to cropping operations.	<input type="checkbox"/>	_____
Large immovable obstacles are flagged or well marked for visibility, even in tall crops.	<input type="checkbox"/>	_____
Buffer zones along drainage ditches give tractors or combines ample turning room.	<input type="checkbox"/>	_____
Low branches of trees are trimmed to allow machinery to pass underneath.	<input type="checkbox"/>	_____
There is clear vision in both directions as you enter the highway from the farm driveway.	<input type="checkbox"/>	_____
The driveway entrance is wide enough to permit entering or exiting without swinging truck, tractor, or combine into opposite lane of traffic.	<input type="checkbox"/>	_____
The corners of all intersections on farm are kept clear of tall crops which might block vision of drivers on the road.	<input type="checkbox"/>	_____







