

# RUTGERS COOPERATIVE EXTENSION

NEW JERSEY AGRICULTURAL EXPERIMENT STATION

## Safety Recommendations for the Stable, Barn Yard, and Horse/Livestock Structures

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Every year there are an alarming number of farm related injuries nation-wide. In 1990 alone, there were 120,000 disabling injuries and 1,300 deaths<sup>1</sup>. Farm owners and managers must begin to make a greater effort to ensure safety around the farm and reduce farm related accidents. Buildings are the site for almost 30% of all farm-related injuries<sup>3</sup>. To help reduce the number of accidents and injuries to employees, visitors and stock, care needs to be taken to ensure that buildings and the surrounding areas meet common safety standards. With a reduction in injury claims, insurance companies will likely begin to lower liability insurance premiums. This fact sheet will help owners and managers to identify areas of concern and how to correct any possible problems.

### Horse/Livestock Barns

- There should be no unnecessary trash or debris lying around inside or outside of buildings. It is unsightly, an attractant to rodents, can start or aid in the spread of a fire, and could cause an injury or fall to a person or animal.
- Any ornamental shrubbery around the exterior of the barn should not be poisonous to livestock. Check with your county agricultural agent for assistance in identifying plants poisonous to horses/livestock.
- No Smoking signs should be posted at all exterior doorways. Have sand buckets for cigarette butts available at the doors. No Smoking

signs should also be posted in lounges, bathrooms and in several other conspicuous places around the barn.

- Correct size and type of fire extinguisher should be located at every exterior door, in the middle of long aisles and next to the main electrical panel box. Fire exits should be clearly marked.
- Every farm/stable should have an emergency first aid kit for both humans and horses/livestock. A phone with posted emergency numbers should be easily accessible.
- Ample Underwriters Laboratories (UL) approved lighting should be available for maximum visibility around the exterior of the building and throughout the interior. Wiring and switches should be encased in metal, weather proof boxes, and out of reach of stock.
- The building should have lightning rods and be properly grounded.
- Doorways and aisles should be free of obstructions and sharp projections, e.g., hardware.
- Ceilings need to have a height of 8-12 feet. Door frames should be a minimum of 8 ft. high with a minimum width of 4 feet.
- Windows need to be inaccessible to horses and livestock, covered with bars or screening and made of safety glass.

- Stall and pen walls should be smooth, free of all projections, and of adequate size for the number of animals to be housed and to prevent casting. Stall doors should have secure latches.
- Water sources should be grounded to prevent accidental electrical shock.
- Feed tubs and water buckets should be smooth, clean and placed securely at the proper height so that the animals cannot become entangled.
- Flooring should be easy to keep clean and provide traction for animals, especially those with shoes. (Note: excessively rough flooring can cause abnormal wear, soreness and bruised feet especially in cattle). Any rotten floor boards should be replaced immediately.
- Cross-ties and other tying areas with safety release snaps should be provided to secure horses.
- Grooming and wash stalls should be in open areas; clean and well-drained to prevent wet and/or icy barn floors.
- Hay storage needs to be away from heat and electrical sources, and if at all possible in a separate building from where livestock and horses are housed.
- Stairs to haylofts should have hand rails and kept free of slippery substances and clutter. Railings should be installed around loft and ladder openings, and ladders should be firmly attached to the wall.
- Hay and bedding should be stacked so as not to fall on top of anyone.
- Low beams and pipes (under 7 ft. clearance), steps or uneven floors should be marked.
- Tack rooms need adequate racks and storage areas to keep equipment off the floor and out of the path of traffic.
- Storage areas should be large enough to keep shovels, pitchforks, wheel barrows, etc. safely away from animals. Items should be hung so that people cannot strike their heads on them.
- Hoses should be neatly hung in wash rack areas so that people and animals cannot become entangled in them.
- Grain storage systems should be rat-proof, weather proof and not accessible to horses and livestock.
- Areas around vents and fans should be kept clear. Fans should be properly maintained and cleaned frequently.
- Garbage receptacles should be available for the deposit of refuse, bailing twine and wire.

### **Turnouts and Pastures**

- Turnout paddocks and pasture fencing should be sturdy, 4-6 feet in height, and able to keep livestock in and unwanted “visitors” out. Any protrusion on which stock may become caught should be removed. Fencing material should be suitable for the type of livestock being housed. Loose wires and broken boards or rails should be attended to immediately.
- Gates should be a minimum of 4 feet wide, swing freely and have no sharp edges or corners.
- Footing should be free of ruts and stones and well-drained.
- Pastures/turnouts should be free of debris, foreign objects and toxic plants.
- Machinery and equipment should not be left in pastures and turnouts.
- Ponds, irrigation and open drainage ditches should be fenced.

- Fallen branches and tree stumps should be removed.
- Washouts should be fixed promptly.
- Any bridges should be strong enough to support horses and machinery.
- Periodic pasture checks should be made to ascertain that no poisonous plants are growing in or around the pasture area.

### **Roadways**

- Roads and driveways should be wide, free of deep ruts and bumps.
- Low hanging tree branches and shrubs should be trimmed back.
- Gates should be wide enough for machinery and trucks, and set far enough back so vehicles are off the main road when stopping to open or close the gate.
- Overhead wires should be high enough for trucks, trailers, tractors, and other equipment to pass under.
- There should be 10 feet wide fire/emergency lanes around all buildings and structures.
- Vehicles should park in designated areas only to keep roadways open for emergency vehicles.
- Vehicle and trailer parking should not be permitted next to barn/stable.
- Vehicular traffic should proceed slowly and with caution.
- Speed limit signs of 15 mph or lower should be posted and enforced.

### **Arenas and Jump Courses**

- Rings and courses should have ample, suitable footing; free-from ruts, holes and unevenness.
- Fencing should be a minimum of 4 feet high and of adequate strength.
- All overhead and protruding branches should be cut back so as not to be a hazard.
- All accessory equipment (e.g., jumps, trail obstacles, barrels, poles) should be in good condition. Any broken or unstable items should be fixed or replaced immediately.
- Rings and jump courses should not attract attention from “outside” such as skateboarders, dirt bikers or all-terrain vehicle riders.
- Gates should be secured so as to deny entry to unauthorized users.

### **Surrounding Acreage**

- Areas around the barns, rings and pastures should be free from debris.
- Ponds, large water storage tanks and waterways should be fenced and posted with “no swimming” and “no fishing” signs to deter trespassers.
- Hazardous passageways, hay drops, manure pits, etc. should be properly fenced and maintained safely.

By following the above recommendations, the number of farm related accidents and injuries should greatly be reduced.

## References

1. Delmarva Farmer. October 10, 1991. "Agriculture: A Dangerous Industry".
2. National Safety Council/Farm Family Insurance Company. 1990. "Your Farm Safety Is No Accident!".
3. National Safety Council. 1975. "Hazard Checklist For Agriculture".

4. Reinsurance Association of Minnesota. 1983. Fire Safety In Agricultural Buildings.

5. Roberts, William J., Buildings For Pleasure Horses. 1979. Rutgers Cooperative Extension.

## Other Related Rutgers Cooperative Extension Fact Sheets

Margentino, M. and Malinowski, 1991. "Accident-Proofing Farms and Stables. FS-605

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