

New York State Occupational Fatality Alert

Fatal Injuries

**Among
Animal
Handlers**
in New York State



The New York State
Fatality Assessment and Control Evaluation

Farmers, veterinarians and other animal service workers handle animals on a daily basis. According to the New York State Fatality Assessment and Control Evaluation (NY FACE) program, **seventeen (17) people died on the job from animal related incidents** between 2002 and 2008.

The following measures can help prevent fatal injuries to animal handlers:

1 Provide workers with the knowledge of animal behaviors and habits;

2 Provide employee training in the hazards associated with animal handling and safe handling techniques; and

3 Design, construct and maintain a safe animal handling facility.

Fatality Facts

Animal Handler Victims (total 17)

- Male: 14 (82%)
- Less than 13 years old:
2 (12%);
between 25 and 44 years old:
2 (12%);
between 45 and 55 years old:
8 (47%);
and over 60 years old:
5 (29%)
- Farm workers:
13 (76%)
- Self-employed (family farm):
9 (53%)

Animals Involved

- Cows or bulls: 9 (53%).
- Horses: 6 (35%).

Incident types

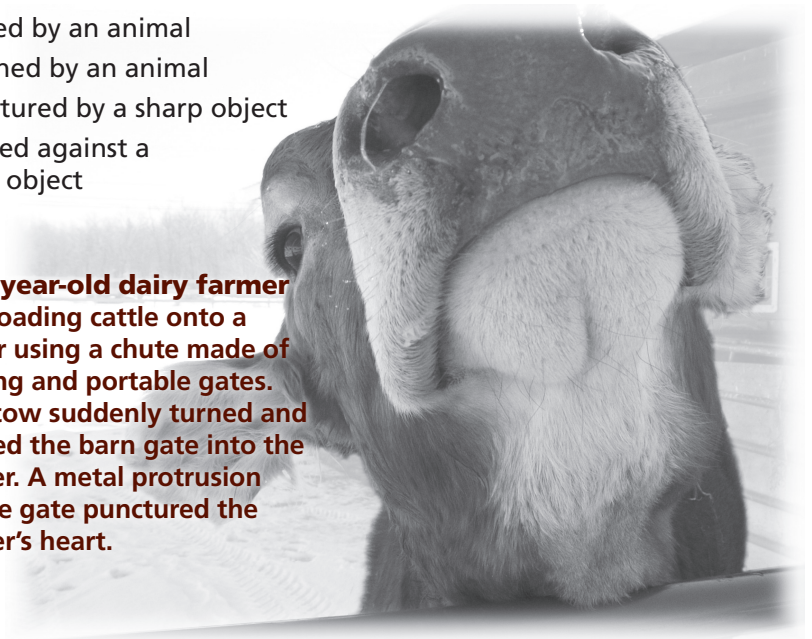
- Attacked by a bull
- Thrown off a horse
- Kicked by an animal
- Crushed by an animal
- Punctured by a sharp object
- Pushed against a solid object

A 48 year-old dairy farmer was loading cattle onto a trailer using a chute made of fencing and portable gates. One cow suddenly turned and pushed the barn gate into the farmer. A metal protrusion on the gate punctured the farmer's heart.

Common Characteristics

Although these fatalities occurred in different work settings, involved different animals and varied jobs, they shared the following characteristics:

- A handler lost control of an animal;
- The handler was fatally injured by the animal or by unsafe features in a facility (e.g., a sharp metal piece on a barn gate) as a result of the animal handling; and
- The factors that prompted an animal to be out of control included the animal's disposition and habits and improper handling and/or restraining by its handler.



Preventive Measures

Animals may not purposely hurt a worker, but their size and bulk make them potentially dangerous, especially when in close contact. Farmers, veterinarians and other animal handling businesses should implement the following measures to prevent injuries.

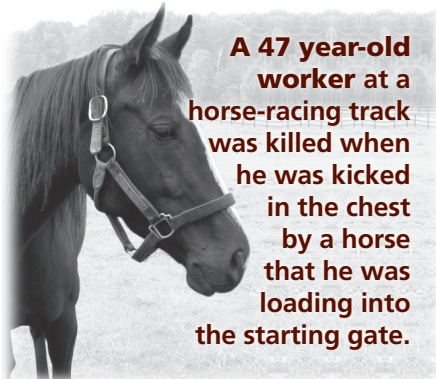
Provide workers with the knowledge of animal behaviors and habits

A good understanding of animal behaviors and habits can help handlers maintain control of routine handling as well as emergency situations.

- Most animals respond favorably to calm and deliberate movement and responses from a handler.
- Animals have a personal space or “flight zone”: if a handler gets too close, they will move away.
- Animals have difficulty judging distances and cannot see directly behind them. Quick movement behind them may frighten them.
- Animal vision is in black and white, not in color. Animals move more readily from dark

areas into light. Bright lights and shadows tend to make animals skittish.

- Animals have sensitive hearing and can detect sounds that human ears cannot. Loud noises frighten animals. High frequency sounds actually hurt their ears, causing animals to become skittish and balky.
- Animals do not like surprises. Cattle become uneasy or skittish when their routines or surroundings change. Cattle can also be easily frightened by strangers or around small children who tend to make sudden movements.
- Stressed animals that are sick, injured, in heat or just mated can be easily agitated and highly unpredictable. Males are generally more aggressive by nature. Female animals tend to be more aggressive when with their young.
- Animals that are stressed show signs of fear or aggressiveness. Warning signs may include raised or pinned ears, raised tail or hair on the back, bared teeth, pawing the ground or snorting.



A 47 year-old worker at a horse-racing track was killed when he was kicked in the chest by a horse that he was loading into the starting gate.

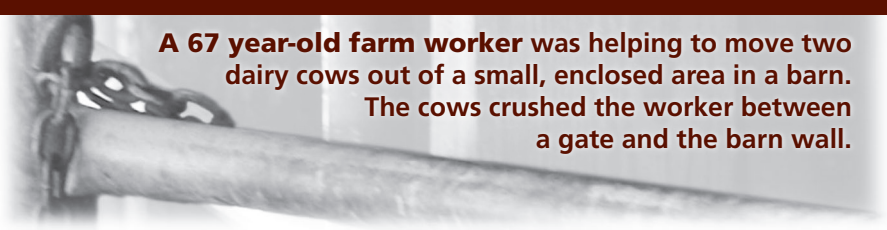


A 64 year-old veterinarian was about to perform a procedure on a Morgan stallion when the horse jumped up and knocked him to the ground. The veterinarian died from head injuries.

2

Provide employee training in the hazards associated with animal handling and in safe handling techniques.

- Approach and handle animals in a calm, steady and consistent manner; don't shove or bump them.
- Approach animals from the front or side. Move slowly and deliberately. Avoid startling animals with quick movements or loud noises.
- Wait until an agitated animal calms down before resuming working with the animal.
- Stop and seek additional help when handling animals that are unusually aggressive or in a situation that is not safe to perform the work. Use proper animal restraints and take adequate safety precaution.
- Promptly remove dangerous animals from farms or facilities to prevent worker injury.
- Plan ahead to allow plenty of time when moving animals. Be patient. Never prod an animal when it has nowhere to go.
- Whenever possible, move and isolate animals from livestock areas prior to performing work in those areas.
- Use a soft light that does not cast shadows that could spook the animals when trying to move cattle at night.
- Exercise extra caution when handling animals that are sick, hurt, new mothers, in heat or just mated.
 - Position yourself so that you are not between a mother and her young.
 - Use special facilities to separate male animals.
- Keep strangers and children out of animal handling areas.
- ALWAYS plan an escape route when working with animals in close quarters.
- Require workers to wear proper and necessary personal protective equipment such as protective safety shoes or boots with non-slip soles, sturdy clothing, gloves and helmets.



A 67 year-old farm worker was helping to move two dairy cows out of a small, enclosed area in a barn. The cows crushed the worker between a gate and the barn wall.

3 Design, construct and maintain a safe animal handling facility.

Many animal handler injuries are directly related to unsafe features or design of the animal handling facilities. A safe animal handling facility can both protect workers and prevent injuries to animals that often cause considerable economic loss.

- Eliminate tripping hazards such as high door sills, cluttered alleyways and uneven walking surfaces that can contribute to falls.
- Build concrete floors with a roughened finish.
- Groove high traffic areas such as alleyways.
- Keep floors dry in working and walking areas. These areas should drain easily.
- Provide non-slip surfaces when possible.
- Construct “man passes” or narrow escape routes in barns where a person can safely get away, but an animal cannot follow.
- Plan and design escape routes from open animal yards.
- Build alleys and chutes wide enough for animals to move through but not wide enough to allow them to turn around.
- Build strong fences and gates to contain crowded livestock using strong and durable materials.
- Build chutes with solid walls instead of wires, fences, or open sides. Solid walls can shield the animals from outside distractions.
- Eliminate or remove any potentially hazardous protrusions and sharp objects in the livestock area, such as nails, bolts and broken boards. These may startle or distract animals and create a dangerous situation for workers.
- Provide lighting that is even and diffused to avoid casting shadows. Avoid layouts that force animals to look directly into the sun.
- Use handling equipment in livestock confinement work operations to reduce the risk of injury. These include hydraulic chutes, portable alleys and headbenders.

Summary

This alert summarizes the characteristics of fatal injuries among animal handlers in New York State between 2002 and 2008 and presents appropriate prevention measures. Understanding animal behaviors, following safe animal handling techniques, and maintaining well designed facilities can help prevent serious injuries including fatalities. Employers should provide initial and ongoing refresher training to workers on safe animal handling practices and policies specific to the worksite. Safe animal handling training courses are offered by the New York Center for Agricultural Medicine and Health (NYCAMH: <http://www.nycamh.com/> or 800-343-7527). Occupational injuries and deaths of animal handlers may be prevented by creating and maintaining a safe animal handling facility and implementing the measures recommended in this alert.

Safe animal handling resources/websites:

New York State Fatality Assessment and Control Evaluation
www.health.state.ny.us/environmental/investigations/face/

National Institute for Occupational Safety and Health Fatality Assessment and Control Evaluation
www.cdc.gov/niosh/face/

National Agriculture Safety Database (NASD)
www.cdc.gov/nasd/

Safe Handling of Large Animals (Cattle And Horses),
Department of Animal Science, Colorado State University
www.grandin.com/references/safe.html


Animal Safety Considerations, University of Missouri Extension
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=G1931>

Animal Handling Safety
State Compensation Insurance Fund
www.scif.com/safety/safetymeeting/Article.asp?ArticleID=343


Tips for Safe Livestock Handling
www.cfa-fca.ca/upload/casw_lstock.pdf

Animal Handling Tips. Penn State, College of Agricultural Sciences, Agricultural and Biological Engineering.
www.agsafety.psu.edu/Factsheets/E14.pdf

Occupational Fatalities due to Animal-related Events,
Wilderness and Environmental Medicine, Vol. 12, No. 3, pp 168-174,
Ricky Lee Langley, James Lee Hunter, North Carolina Department
of Health and Human Services, Section of Human Ecology and
Epidemiology 2001



The New York State Fatality Assessment and Control Evaluation (NY FACE) is an occupational fatality research and prevention program that is funded by the National Institute for Occupational Safety and Health and administered by the New York State Department of Health.



Additional information regarding the
NY FACE program can be obtained from:

New York State Department of Health
NY FACE Program
Bureau of Occupational Health
Flanigan Square, Room 230
547 River Street
Troy, NY 12180

1-866-807-2130
(518) 402-7900

www.nyhealth.gov/nysdoh/face/face.htm