

# What to Do When Animals Run Amuck

**Jodi Lovejoy, DVM**

TIM Trainer, Animal Care and Wellbeing Specialist

**Indiana State Board of Animal Health**



*Turkey trailer overturn moments after incident, state highway; (photo credit: jlovejoy)*

32.8 million cattle.

132 million hogs.

2.23 million sheep and lambs.

9.35 billion chickens.

These are the numbers of animals transported to slaughter annually in the United States.

Whether you live in a county where cows, pigs, or poultry outnumber people, or you live in an urban metropolis with more concrete than grass, these numbers should serve as a reminder: A lot of animals are on the roadways – all roadways, 24 hours a day, seven days a week.

These figures only account for commercial transport of animals heading to slaughter plants. The numbers jump when accounting for livestock moving between farms, traveling to shows, heading to sales, or, in the case of horses, going to state and national parks for trail riding.

Animals present on farms, at shows, in parks, and even in urban backyards significantly outnumber the animals in transit.

That is why *every* first responder agency should pre-plan for the inevitable livestock-roadway incident regardless of location. The incident may be escaped animals or animals in trailer crashes.

This article provides awareness-level information and general principles – addressing every scenario is not possible. Resources are provided for more in-depth information and training at the conclusion of this article.

## ***Planning Ahead***

Pre-planning should involve working with your county or district Emergency Management Agency (EMA). The EMA may already have plans and a resource list to aid in response to a livestock incident. If not, this is a great time to create plans and develop a resource list. Handling livestock running-at-large or livestock involved in a trailer crash is very similar to handling livestock in natural or man-made disasters. Preparing for road incidents strengthens a county's overall ability to handle livestock in any type of emergency.



*Commercial cattle trailer overturn on interstate; secondary containment in place, local resources being utilized to transport surviving cattle, interstate closed both directions; (photo credit: B. LaHue).*

Resources needed to handle livestock incidents effectively are extensive. The items listed below are examples of equipment and personnel that are beneficial to have on a resource list:

- *Containment:* Loose animals need to be contained. Containment equipment can include items such as portable coral panels, plastic ‘snow’ fencing with PVC pipe ‘posts’, halters, lead ropes, and gloves. What is needed will depend upon the species, number of animals involved, and circumstances.
- *Transportation:* Appropriate conveyances to remove animals from a scene. Transport requires livestock trailers and trucks to pull them, as well as knowledgeable truck drivers who can handle trailers. Deceased animals may need to be transported. This requires equipment that can pull or lift animals that may weigh well over 1000 lbs.
- *Care and Housing:* Involved animals may need temporary care and housing. This requires sufficiently fenced locations with shelter, the ability to provide food and water, and personnel to provide care. Professional veterinary care may be needed.
- *Handling:* Safely containing, transporting, and housing animals requires people knowledgeable about livestock or poultry behavior and handling.

Determine if a technical large animal emergency response team operates in your area. If so, they will be a tremendous asset. Typically, such teams have an acronym like TLAR or TLAER. When searching for a local TLAER group be sure to include the term ‘technical’. This differentiates groups who respond to animal-related incidents (TLAER) from those who take in unwanted or neglected animals (farm animal rescue).

If a resource list does not already exist, some points-of-contact who may be able to help develop such a list include, but are not limited to: cooperative Extension offices, livestock (large animal) veterinary clinics, agricultural universities/colleges, and local or state livestock/horse/poultry associations. Donations or grants may be a way to build technical livestock emergency rescue response capabilities.

Proactively incorporating animal response into the Incident Command System (ICS) is essential. Determine who initiates the animal response plan. This may vary depending on the scenario. In natural disasters, initiation may come from the EMA; in roadway incidents, initiation may come from a designated first responder agency such as Fire, or from first-on-scene. In any case, the resource list should be available at a central location, such as dispatch, to allow 24/7 access and coordination of efforts.



*Escaped cow running-at-large, focused on first responder;*

*The Local.de; Deutsche Presse-Agentur (dpa)*

## ***Staying Safe***

Animals are reactionary. They have fewer inhibitions than people. They do not consider moral, ethical, or potential legal issues before acting. Animals' choices when confronted with a stressful situation are: flight (run away), fight (knock the living daylights out of someone), or freeze (pretend to be a statue).

If an animal chooses flight and you are standing in its way, it will run over you. If it chooses to fight, it can bite, strike with its front legs, kick with its rear legs (nearly 360 degrees), butt, and, again, run over you. If it freezes - a situation that is often misread as being calm - it can suddenly erupt into either flight or fight mode.

All livestock, regardless of size, can cause significant injury to people. Do not underestimate the injury-causing potential of short-statured livestock such as sheep, goats, and pigs. All livestock have 4-wheel-drive propulsion. Short-statured livestock are at a perfect height to hit a person at the knees. Do not be overconfident just because an animal doesn't look 'big and scary'. A fluffy, baaing, sheep is just as likely, if not more so, to run a person over as an adult cow.

Even that cute little 20-lb. baby pig can let off a squeal that hits 115 decibels. (For comparison: an ambulance siren is 120 decibels.) Ear protection when working with pigs is an absolute must.

It isn't urban legend that hogs will eat people. They will.

Poultry can peck or pinch with their beaks, which can be very painful. Poultry have sharp nails that can cause painful scratches. While birds don't have 4-wheel-drive propulsion, they do have



wings - which they flap violently to distract would-be predators. Flapping wings can cause painful strikes.

Always work in teams of at least two people for safety.

### ***Understanding Human-Animal Interactions:***



*Annikaliu*

*Predator: natural born killer*



*jlovejoy*

*Prey: expects to be chased and attacked by predator*

All livestock and poultry species are prey animals. They are innately aware a predator is somewhere waiting to attack.

People are predators. We are innately hard-wired for the hunt/chase.

### ***Understanding Predator vs. Prey:***

Identifying whether an animal is predator or prey is easy.

**Predators** have eyes on the front of their heads (or close to it in the case of predatory birds). This gives predators excellent depth perception – necessary for judging chase distance and accurate striking/biting distance. Predators have poor peripheral vision.

**Prey** animals' eyes are located on the side of their heads. This gives them nearly 360-degree vision, allowing them to see any predators stalking from almost every direction. Their main blind spots are immediately in front and directly behind. Prey animals have poor depth perception.

Predators focus hard on their intended dinner. Thus, prey animals have developed an aversion to being stared at.



*Gfycat*



*Shutterstock, tom177*

*These two images look the same to prey species. Do not stare. It's stress-inducing and it's rude.*

People have habituated livestock and poultry to accept our presence even though we are predators and they are prey. This doesn't mean they have forgotten the original relationship of eater and eaten. Under stressful circumstances even relatively calm animals can respond like they have never seen a person before and expect to be eaten at any moment.

People, under stressful situations, will regress to primitive instincts as well. Our chase drive will kick in when we see that loose horse heading down the road. Our first instinct is to chase after it.

**The Chase:** What happens when a predator starts chasing a prey animal? The prey animal moves away as fast as, or faster, than the predator is approaching. Then the predator speeds up, as does the prey. This will continue until either the predator gives up or the prey animal is exhausted.

You cannot outrun any of our livestock species. (You would be surprised at how fast a chicken can run.) The smaller livestock species and poultry are very good at changing direction on a dime as well. These two points make it highly unlikely a person will be successful in getting hands on an animal they are chasing.

**Flight Zone:** A component of the chase scenario is the animal's personal space, or flight zone. If we stay out of an animal's flight zone, the animal will not move away from us. If we slowly and barely enter this zone, the animal will move away, likely slowly. If we charge into its flight zone it will move away quickly. The size of the flight zone varies by individual animal, its past experiences, and its current state of mind.

Understanding and properly using an animal's (or group of animals) flight zone is an effective way to move an animal(s) gently and slowly.

If an animal starts to move away from you and you don't want it to, back up to get out of its flight zone. Please see Resources below for YouTube videos demonstrating flight zone.



*Escaped cow being “chased” down city street; abcnews.go.com*

### ***Language Barrier:***

Animals do not understand human spoken language. If we want to effectively communicate with them, it's up to us to match their communication style.

Animals communicate by body language much more so than by vocalization. They read each other's body language and they read our body language. The more tense we are, the more tense they will become. Looking calm is imperative; relax the facial muscles, drop the shoulders, do not squarely face the animals, and do not stare.

Most of our livestock species use vocalizations to locate herd mates (I'm here, where are you?) and to indicate *distress* (OMG! I'm scared), other than that they are quiet. Pigs are an exception, they tend to 'talk' quite a bit, usually described as grunting. Poultry also tend to 'talk'.

When calm animals vocalize, it is usually at a low volume and low pitch. We should mimic this communication method. We can do this by talking softly in a low pitch, like you would if trying to calm a scared child. The words do not matter; it is how you talk that matters.

### ***Thinking ability:***

In very broad terms, most livestock and poultry have the thinking capacity of a 2- to 5-year-old child. Remembering this can help you properly manage animals.

Think about how young children respond in a scary situation, such as being in an unfamiliar location or being involved in a car crash. Many times, their ability to respond in a rational way disappears. The same is true for our livestock and poultry. Their behaviour can be vastly different when running-at-large (outside their normal enclosure) or involved in a trailer crash compared to when they are on their home turf.

When working with an animal on roadways it may be helpful to think about the animal as an upset 3-year-old child wielding sharp scissors. This serves as a reminder of the animal's thinking ability and its ability to cause harm.

### ***Moving Forward:***

1. Evaluate the concentration of livestock and poultry living in your jurisdiction; research how many animals transit your jurisdiction via roadways. County Extension specialists, state Department of Agriculture, or state veterinarian's office may be able to assist.

The United States Department of Agriculture (USDA) National Agricultural Statistics Services (NASS) has data on agricultural animal numbers. A link to the USDA NASS website is provided under Resources.

2. Plan for animals running-at-large or trailer crashes. It will happen no matter your location. Utilize ICS.
3. Develop a resource list: equipment, personnel
4. Exercise the plan. Tabletop exercises to hone the plan, then full-scale exercises with real animals, real equipment, and real people.
5. Adjust the plan based on lessons learned. Repeat.
6. Try to appear as calm and non-threatening as possible. Animals are experts at reading body language. If you are tense they will become more tense. If you stare they will think they are going to be dinner.
7. Loud sounds are very distressing to animals. Turn off sirens and keep the scene as quiet as possible. The presence of people is often stressful for livestock and poultry species. The more stressed they are, the more likely it is they will respond with flight or fight. The more people, the more stress. Keep non-essential responders and citizens away from the active scene.
8. Livestock, like people, love food. The sound of grain rattling around in a bucket is very enticing for animals used to receiving grain. A bucket of grain can sometimes be used to draw animals into an enclosure. In a pinch, a handful of rocks rattled around in a



container may sound enough like grain to trick animals. Hay can be used to calm trapped animals and to draw loose animals into an enclosure. Pigs don't typically receive hay, so for them a bucket of grain or sight of a feed pan will be more enticing. Pigs are inquisitive though, so if hay is all you have, try it.

9. All livestock and poultry species are herd (or flock) animals. They want to be in a group: they hate being alone. If the previously listed methods do not work to contain animals, bring in a buddy. The best buddy would be the same species. Another livestock species may work in a pinch. The buddy should be very calm and easy to handle. The buddy can be put in or near where you want the loose animals to go. In some cases, you may be able to lead the buddy past the loose animals. This may entice the loose animals to follow the buddy. The buddy can then be led into an enclosure with the loose animals 'in tow'. If one of the loose animals is calm it may be used as a "buddy". If you can convince it to go where you want, the others will likely follow. Unfortunately, the opposite is also true: If an animal goes where you don't want, the others will likely follow.
10. If the animals are staying in one area, use portable fencing to enclose the animals where they are. Make the enclosure as large as possible to avoid entering the animals' flight zone. Once the animals are contained, the enclosure can be modified in shape, size, or even moved a little at a time, to facilitate returning the animals to their home pasture or loading them onto trailers.
11. Make the place you want the loose animals to go as inviting as possible. See the previous food comments. In addition to providing food and/or a buddy, make the entrance to the enclosure as open as possible (keeping in mind you need to be able to close it easily). Animals also prefer to move toward brighter areas. They will almost never move into a darker, unfamiliar area. At night (which is statistically the most likely time trailer crashes occur and, in my experience, when cows tend to escape their pasture) provide some diffuse, low lighting along the path to and at the final enclosure you want the animals to enter. Point lighting in the direction you want the animals to move – do not point lighting toward the animals, doing so will blind the animals and they won't move forward. The goal is to make an area that is better lit than the surroundings. Avoid harsh contrasts in lighting. Illuminating a pile of hay (in the case of livestock) and/or feed pans inside the enclosure may be helpful. If you want animals to enter a trailer, provide some diffuse lighting inside the trailer so it doesn't look like a dark cave.
  - a. Animals will rarely, if ever, go back through the hole in the fence they used to get out. If the location of the escape is **clearly evident**, open the break in the fencing more so the animals can see a clear path back into their pasture. If not clearly evident, do not cut the fence.
  - b. Typically, rural settings offer a lot of fenced areas. Cutting a nearby fence and directing the animals into that area can be tempting. This should not be done unless the property owner has been consulted and has given approval to cut the fence. If exigent circumstances make it necessary to cut a fence prior to owner approval, the property owner should be contacted as soon as possible and notified of the situation.
  - c. If you cut a fence, after the animals move through it, secure the cut section to decrease the likelihood the animals will be able to escape through that section.

Wire, zip ties, rope, or similar material are some options that may be used to reconnect fence sections temporarily.

12. Make where you want the animals to go be the easiest place for them to go. In addition to making the target site enticing with food, a buddy, lighting, and easy access, attempt to block routes that don't lead to your target site.

This point can be difficult to implement when animals are loose on a roadway. The difficulty level raises exponentially if the animal is running vs. walking. If there are open fields, or, conversely, dozens of city streets, it may not be feasible to block off all escape routes.

Establish a barrier. Try to not enter the animals' flight zone while putting barriers in place.

Use portable corral panels, plastic fencing, etc. Incorporate natural and pre-existing structures if possible.

An animal will go through any gap in the blockade

Make the barrier/blockade visible

Try not to excite the animal, but now is when it may be necessary to make some noise or motion to discourage an animal from testing the barrier

13. If the animal is going where you want it to go – ***leave it alone***. If you apply pressure (stress) by shouting or moving in on the animal to 'force' it onward faster there is a very good chance the animal will turn and run away. Leaving it alone gives the animal a chance to think, versus react. If an animal is in an area where it is not an immediate threat to the public (such as between two houses in suburbia or a patch of grass within a rock face) place a barrier(s) across any openings and leave it alone until a more permanent solution can be implemented. Do not try to move the animal deeper. It will run over you and escape.

The slower you go, the faster you will accomplish your goal. Animals don't wear watches; they don't care about timelines, commerce, or secondary crashes. They do care about not being scared, or hurt, and having something to eat and drink. They want to be in familiar surroundings and with their herd mates. The best way first responders can protect the public, reopen roadways, and decrease the likelihood of secondary crashes is to understand how animals behave and what they want.

14. If animals are running-at-large on roadways the affected roadway should be closed to the motoring public.

### ***Grim Reality:***



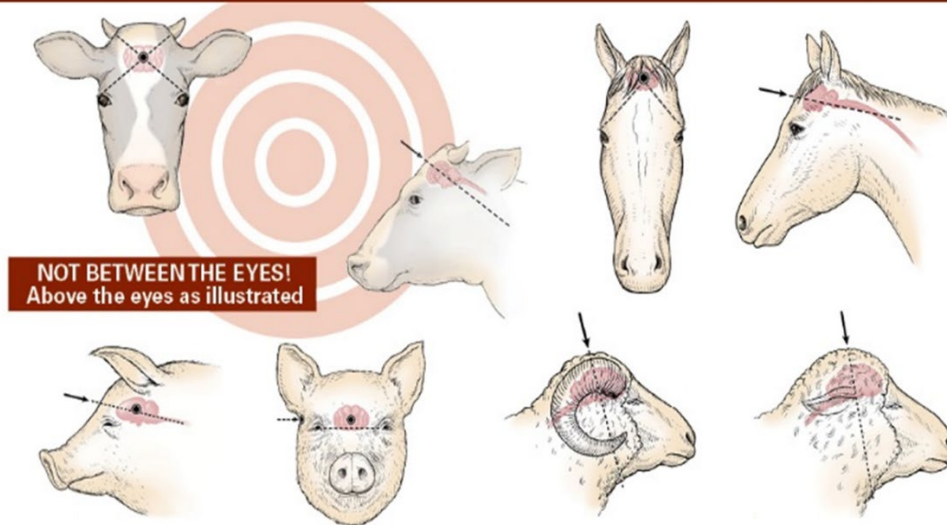
*Cattle trailer overturn, deceased cattle; B. LaHue*

Some roadway incidents may result in livestock or poultry being severely injured. Owner's wishes, insurance company's wishes (commercial livestock/poultry and individual high value animals may be insured), and animal's wellbeing should all be weighed when deciding if an animal can be saved or should be euthanized. Preferably a licensed, accredited veterinarian would evaluate the animal(s) and provide a professional opinion. If euthanasia is the best option then either a licensed, accredited veterinarian should perform the euthanasia or appropriate field euthanasia techniques should be employed.

Livestock field euthanasia technique information may be found at:

<https://vetmed.iastate.edu/HumaneEuthanasia>

# Anatomical Sites for Livestock Euthanasia



## Firearm and Bullet/Shotshell Selection for Euthanasia of Livestock

**Handguns and rifles** - A .22 caliber rifle is sufficient for young animals, but results are not consistent in adult animals. A .22 magnum or larger caliber firearm is preferred.

**Shotguns** - A 12, 16 or 20 gauge are preferred loaded with slugs are best, but birdshot No. 2, 4, or 6 can be used.

## Confirmation of Death

Regardless of the method of euthanasia used, death must be confirmed before disposal of the animal. The following should be used to evaluate consciousness or to confirm death.

1. Lack of a heartbeat
2. Lack of respiration
3. Lack of a corneal reflex
4. Presence of rigor mortis



IOWA STATE UNIVERSITY  
University Extension

<http://vetmed.iastate.edu/HumaneEuthanasia>



8/10/2012

*From Iowa State University, Humane Euthanasia site*

Planning should include consideration of resources to handle and dispose of animals that expire or are euthanized on scene. Plans should be made for appropriate equipment to move and haul carcasses for safe and proper disposal according to local and state laws.

If an involved trailer is still road safe, deceased animals inside the trailer may be left in place and the trailer moved to an off-site location for unloading.

Animals killed or euthanized due to roadway incidents cannot be used for human consumption. The only exception may be if the actual animal owner wants to salvage the carcass for personal use and no chemicals were given to the animal at the incident scene.

Similarly, cattle that cannot walk cannot be used for human consumption or taken for slaughter.

This may seem to be a waste of “perfectly good” meat. These restrictions, however, are meant to protect the wholesomeness and safety of food destined for human consumption.

Check with your state’s Department of Agriculture or state veterinarian’s office for state-specific guidance. Follow their instructions.

### ***Animal Products Involved in Incidents:***

#### ***General guidelines:***

If a milk tanker is breached the milk cannot be used for human consumption. The state’s dairy regulatory agency should be contacted. The state’s Department of Environmental Management should be contacted for any spills.

If packaged animal and egg products are involved in an incident contact the local health department.

Check with your state’s Department of Agriculture or state veterinarian’s office on how to handle animal products involved in traffic incidents. Follow their instructions.

### ***Final Thoughts:***

Animal-roadway incidents are inevitable. Every animal-roadway incident, whether its animals escaped from their home pasture or 200 young pigs in an overturned trailer on an interstate, poses a risk to responders, the public, and the animals. Pre-planning and training drastically shorten the time between detection, response activities, and clearance. This substantially decreases the risks associated with these events. As with Traffic Incident Management (TIM), there are best practices to handle animal-roadway incidents. Learning and implementing these best practices can have a direct, positive impact on responder, public, and animal safety and wellbeing.

### ***Resources:***

#### ***Training/education:***

Flight zone YouTube videos:

<https://www.youtube.com/watch?v=Iwu8NcrI0z0>

[https://www.youtube.com/watch?v=o1\\_mA9dWc8I](https://www.youtube.com/watch?v=o1_mA9dWc8I)



Information on livestock numbers:

United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS): [https://www.nass.usda.gov/Statistics\\_by\\_State/index.php](https://www.nass.usda.gov/Statistics_by_State/index.php)

From this page you can choose your state, then drill down into more specific information, including county-level. Choosing the State Overview option will provide data for the entire state on number of head of various livestock species.

Websites for training:

Technical Large Animal Emergency Rescue, Inc.: [www.tlaer.org](http://www.tlaer.org)

Code 3 Associates: <http://www.code3associates.org/>

FEMA on-line livestock in disasters training course, IS-111.A:  
<https://training.fema.gov/is/courseoverview.aspx?code=is-111.a>

Book:

“Technical Large Animal Emergency Rescue” by Rebecca Gimenez, Tomas Gimenez, and Kimberly A. May, 2008, Wiley-Blackwell Publishing

***Example of what state-specific guidelines for livestock and poultry can look like:***

<https://www.in.gov/boah/files/AnimalFoodPrdtDispsitnSOG6-12-17Final.pdf>

***Euthanasia information:***

<https://vetmed.iastate.edu/HumaneEuthanasia>

<https://www.in.gov/boah/files/FieldEuthLvstGunshot5-2017.pdf>

<https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf>