



PREPARING FIRST RESPONDERS FOR ACCIDENTS INVOLVING LIVESTOCK

3.16 million

head of livestock in Michigan
(USDA NASS, 2023)

400

approximate number of meat
processors in Michigan
(Schweihofer et al., 2014, p. 3)

Over 700

people trained by MSU Extension
in emergency response to
accidents involving livestock

PRIORITY

A R E A S

- In-person training for first responders and animal transport professionals on how to respond effectively to transportation accidents when animals are involved
- Virtual training modules that expand the reach of the Emergency Response to Accidents Involving Livestock (ERAIL) training program
- Consultations for organizations, locations and units that are preparing for accidents involving livestock
- Fleet of emergency response trailers of essential equipment to mount an effective response
- Development of an organized network of trained responders throughout the state

IMPACTS



15 successful ERAIL trainings since inception in 2019



Over 700 first responders and industry partners trained



Over 40 Michigan counties with responders or partners

PUBLIC VALUE

Michigan State University (MSU) Extension helps ensure strong, safe communities by providing resources for local governments and law enforcement to keep travelers and our food supply secure when dealing with accidents involving livestock animals. When accidents happen, highly trained emergency personnel respond quickly to assist human drivers and their passengers. However, when these accidents involve livestock animals, first responders and many animal control officers don't have adequate training to handle these situations, which can be dangerous for responders, drivers in the area and the animals involved. To address these challenges, MSU Extension assembled tools, training and resources to help animal control officers and first responders develop their skills in working with large animals.

ERAIL TRAINING FOR FIRST RESPONDERS, LAW ENFORCEMENT OFFICERS & ANIMAL AGRICULTURE WORKERS



ERAIL training participants practicing moving and containing pigs.

The animal agriculture industry is robust in the United States, with trucks and trailers transporting millions of animals weekly for food production, exhibition and recreation. The transportation process comes with risks of unexpected accidents involving livestock. These types of accidents can quickly become chaotic, posing risks to the safety of responders to accidents, the welfare of the animals involved and the safety of the public traveling the roadways.

“What was eye opening was how many of my first responder colleagues did not know anything about animal handling or equipment. This was good training for them, more of them need this information.”

• ERAIL trailer training participant

MSU Extension developed the ERAIL program to assist first responders, law enforcement officials and the animal agriculture industry to prepare for these accident situations. This program is designed to support Michigan’s animal agriculture industry by providing resources to assist in the response to accidents that involve animals.

MSU Extension held an in-person ERAIL training at the MSU Pavilion in October 2023. This training included classroom presentations on proper handling practices of various livestock species, animal behavior, handling of compromised animals, mortality management and ERAIL response trailers. The training’s hands-on session focused on growing the confidence of first responders when working with livestock by increasing their understanding of animal behavior and movement with hands-on practice.

MSU south campus farms provided cattle, pigs and sheep for the training for the animal-handling sessions. For the first time, this ERAIL training covered how to respond to accidents involving honey bee colonies. Livestock trailers were present for attendees to walk through and learn from livestock haulers on navigating different types of livestock trailers. Participants from the training shared they plan to work with their local emergency departments to develop a response plan, work toward procuring a response trailer, integrate the ERAIL training into their yearly instruction and gather supplies to be prepared for accidents of this nature.

“I think all the training provided is needed, we have all livestock around our area.”

• ERAIL trailer training participant

98%

of participants reported that the training created or reinforced awareness of the resources, skills and people needed to respond properly to a livestock transportation accident.

94%

of participants reported that their skill level increased moderately to significantly when using livestock emergency response equipment because of the program.

41%

of participants indicated they had never used any of this equipment before.

FLEET OF ERAIL TRAILERS CONTAIN SUPPLIES TO PROMPTLY RESPOND TO ACCIDENTS INVOLVING LIVESTOCK

An accident involving livestock demands an effective and efficient response when human safety and animal well-being are at stake. However, traditional response vehicles are not equipped with specialized equipment to work with animals. Sourcing animal containment and handling equipment when not prepared poses a huge barrier to a proper response, one that MSU Extension's ERAIL team addresses through a partnership with the Michigan Department of Agriculture and Rural Development (MDARD).

The ERAIL team successfully applied for grants to purchase and place three fully stocked ERAIL response trailers in Michigan. The team identified areas that frequently receive animal transportation traffic, including major highway junctions, to place ERAIL response trailers. Three response trailers are stationed in Gaylord, Coldwater and Jackson. The ERAIL team collaborated with local emergency departments in these locations to deliver training and prepare responders to deploy their response trailer if an accident involving livestock in the area should take place. Emergency responders have shared how having a response trailer and the equipment stored inside have greatly improved their ability to safely remove animals from a trailer, handle livestock and contain animals for transport.

The Emergency Management Division at MDARD observed the success of ERAIL response trailers and the need for this type of support for our first responder and agriculture communities, and granted funding to source, stock and place six additional trailers to the ERAIL team. Plans are underway to place additional trailers in Berrien and Gratiot counties by June 2024 and other locations, and partnerships have been identified to place the other trailers.

The MSU Extension ERAIL team also trains first responders in how to locate and use response trailers.

MSU Extension delivered one of these trailer training programs for first responder departments in Calhoun County in 2023. First responders from 12 departments across the area attended the program. This training provided participants hands-on opportunities to work in scenario-based situations using the equipment to set up animal containment and handling. The training increased awareness of ERAIL trailer locations and contacts and demonstrated how to use equipment contained within the ERAIL trailer. The information shared at the training will be taken back to the departments and shared so that the Calhoun County first responder community will be informed and trained on how to access and use the ERAIL response trailer.

Combining resources, tools, equipment and proper training allows Michigan's first responders and agriculture communities to be best prepared for an unexpected accident involving livestock. This preparedness work done by the MSU Extension ERAIL team supports communities by focusing on human safety, animal well-being and public safety.



ERAIL response trailers are stocked full of equipment to handle animals involved in roadway accidents.

“With our vast number of livestock operations in Michigan, it is important that we are prepared to respond to unplanned events that may arise. The work of the MSU Extension ERAIL team better positions the pork industry and the entire animal agriculture industry in Michigan to safely and effectively respond to these types of situations.”

• Mary Kelpinski, CEO, Michigan Pork Producers Association

ERAIL TRAINING & TRAILER FACILITATE EFFECTIVE RESPONSE TO ACCIDENT OF A TRUCK HAULING PIGS



The ERAIL response trailer that was deployed to respond to an accident in Michigan's Branch County.

On a sunny, 50-degree day in December, a livestock semi-truck and trailer with a load of 120 pigs headed to market overturned on a two-lane highway in southern Michigan. While accidents involving animals do not happen frequently, these unexpected events can quickly turn into chaotic and dangerous situations without proper training and supplies.

The ERAIL program's comprehensive training and access to equipment was key to the effective and efficient response to the December event. First responders who had attended an MSU Extension ERAIL training were on the scene, and Branch County's ERAIL response trailer was quickly deployed

so the proper equipment and supplies were available. The animals were efficiently extricated from the overturned trailer and contained until additional transportation was found. The response was carried out while supporting the safety of the first responders and the public traveling the roadways and keeping animal welfare at the forefront of the response. Throughout the entire accident response, the MSU Extension ERAIL team aided in the event. From deploying the ERAIL response trailer, coordinating veterinary assessment of the animals and providing expertise on the response, the team was engaged in assisting the farm, processing destination and responders.

“ Thank you to the ERAIL team! The trailer worked out great and all of the first responders were properly trained to use the equipment. We are very thankful you made this resource available and helped us through this accident event. ”

• Owner of animals involved in trucking accident

“ I don't know whose idea that trailer was, but it was amazing, we couldn't have done this response nearly as fast if we didn't have this trailer. ”

• First responder

“ That trailer saved us today. ”

• First responder

REFERENCES

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MSU Extension provides educational opportunities that combine classroom and hands-on education to meet the varied learning styles of people employed on dairy farms. This approach allows for those that learn by listening and those that learn by doing to increase their skill set and develop or refine animal care and management skills.