

Don't Let Disease Be a Show Stopper

Whether it's a county fair or national livestock show, keep biosecurity in mind for both animals and people.

by Kindra Gordon, field editor

In terms of disease transmission, livestock shows offer opportunities for “the worst case scenario,” says Brian Vander Ley, a veterinary epidemiologist with the University of Nebraska’s Great Plains Veterinary Education Center in Clay Center, Neb.

Vander Ley explains, “It’s the worst case scenario because at a livestock show, you are commingling a lot of animals and people from a variety of different places and bringing them into one space. Then at the end of the event, those same animals and people disperse and go back to different places or even on to other livestock shows. Thus, if we had some sort of disease that came in, it would be able to propagate and spread quickly in that environment with the potential to spread over a wide area before it could be controlled.”

Therefore, Vander Ley, who has worked in veterinary roles at county and state fairs in Iowa and Missouri and as a veterinarian at the American Royal Livestock Show, advocates that livestock show organizers and exhibitors must all be vigilant in caring for animals and minimizing disease risks.

“We want healthy animals and healthy people to show up for a livestock exposition, and we want to send those folks and animals home in the same condition we had them arrive in,” he says.

you have an understanding of these pathways, Vander Ley suggests taking steps to break these transmission routes. Ask yourself, “How do I interrupt direct contact or control vectors, for example?”

Regarding transfer of pathogens from fomites (equipment), Vander Ley says, “Youth exhibitors often like to help one another out by sharing water pails, shovels or grooming items; but these types of activities are detrimental in terms of spreading disease and compromising animal health.”






He adds, “It’s important for exhibitors to have better awareness for disease transmission risks and build in biosecurity steps for the health of their animals.”

As one example, he points out if an exhibitor has a bred heifer that becomes exposed to an

animal that is a bovine viral diarrhea (BVD) carrier at a show — through direct contact or sharing a water pail with the infected animal — once the exhibitor returns home with that heifer it could cause a herd impact.

To exhibitors, he advises be prepared at a show by having enough equipment so you don’t have to share items with other exhibitors.

Five main disease transmission pathways

-  **Direct contact** — animals touching one another and spreading pathogens
-  **Fomites** — these are equipment items that may be used on one animal and then used on another animal and could transfer disease. This may be water pails, grooming equipment, or shovels used to remove manure.
-  **Aerosol** — a sneeze or a cough can produce large airborne droplets that are dispersed; or a small pathogen like foot-and-mouth disease could be transferred via the wind.
-  **Oral** — most commonly this may be a pathogen shed in the feces that gets into the mouth.
-  **Vectors** — this includes insects such as flies and ticks.

Understand transmission

Instead of thinking about individual diseases, Vander Ley suggests thinking about risk management by understanding routes of disease transmission — essentially how pathogens move from one animal (or person) to the next.

He explains there are five main disease transmission pathways. Once

He suggests remembering the mantra: “Sharing equipment is sharing diseases.” And, if you do share equipment, he encourages disinfecting it afterwards before use on your animals and before returning home.

Additionally, Vander Ley advises keeping bedding clean and removing manure from stalls and pens. Also, keep manure piles away from where animals are stalled. These protocols can help reduce insect and oral transmission risks.



Additionally, Vander Ley is a proponent of handwashing stations within livestock show barns. He explains that extra sinks within a facility — away from the wash

Lastly, Vander Ley emphasizes if an animal is sick, the decision should be made by the exhibitor to leave that animal home. People who are sick — especially with the flu — should

also stay home, as some diseases can be transferred to animals (especially poultry and swine.)

“Shows are stressful events and not the place for sick animals; plus it puts other livestock at risk,” Vander Ley concludes.

Upon returning home from a show, keeping show animals isolated from the rest of the

Support health efforts

Vander Ley asks livestock exhibitors, show organizers and attendees to be supportive of efforts in place to ensure animal and human health at livestock shows. He notes, “The best way to prevent disease from spreading at a show is to make sure it never gets in.”

Steps that he believes are important and beneficial include: requiring a current health paper from a veterinarian prior to the show; having livestock inspected (preferably by a veterinarian) at the show as they come off the trailer and prior to being put in the stalls; and having a veterinarian present throughout the show to monitor animals.

He also suggests exhibitors and show organizers to monitor animals daily during a show for any signs of illness. Vander Ley says, “Early morning or late at night are the best time to listen for coughing or to observe visual signs of animals not feeling well.”

rack or bathrooms — allow extra opportunities for those working with animals to wash their hands or equipment. They also allow the public additional places to wash their hands, which may decrease zoonotic disease (animal to human) transmissions.

herd for 3-4 weeks and monitoring their health prior to turnout is also a good biosecurity measure to reduce disease transmission risk. **AJ**

Be aware of heat stress, too

Another common concern for livestock at shows is heat stress. Unlike humans, cattle, pigs, sheep, goats, chickens and rabbits are not able to sweat as means to cool themselves. Instead, these livestock species cool themselves using evaporative cooling of fluid from their lungs through the trachea and nasal passages, explains Brian Vander Ley, a veterinary epidemiologist with the University of Nebraska.

Thus, water is necessary for these animals to help ensure their bodies can cool off and avoid heat stress. Vander Ley stresses, “Never allow water deprivation.” Fans and misters can also help create a cooler atmosphere during a show.

Signs of livestock heat stress can include an open mouth, panting and drooling. “They are breathing so hard, they don’t swallow their saliva,” Vander Ley explains. He notes that because show cattle often have heavy hair coats and extra fat cover, they can be more susceptible to heat stress.

Heat stress is typically a result of warm temperatures combined with high humidity. Vander Ley reports even temperatures in the low 80s° F with high humidity can cause heat stress.