

# Keeping Your Livestock Show Animals Healthy: Disease Prevention



Livestock show season can be a very exciting and busy time for exhibitors and their families. For many families, preparation and travel to shows and exhibitions require considerable time and commitment. Following good health management practices before, during, and after the exhibition will help protect these investments by keeping your livestock healthy and in good condition. Responsible exhibitors must have an understanding of common diseases of concern in exhibition animals, and know how to recognize signs of illness.

## Disease Recognition

Exhibitors should be able to recognize common signs of illness in their animals and contact a food animal veterinarian when any of the following signs are observed:

- Decreased or lack of eating or drinking
- Sudden decreased milk production in lactating animals
- Severe dehydration
- Change in amount or consistency of manure (constipation, straining, diarrhea, change in color)
- Abnormal discharge from eyes, nose or mouth
- Lameness or unwillingness to stand
- Fever (observed as shaking or shivering)
- Unusual patterns of hair loss or skin rashes

Temperatures in livestock may be slightly increased when they are stressed, crowded or transported. The average rectal temperatures and ranges for livestock are listed in Table 1.

Certain symptoms can be indicative of a more serious ailment or foreign animal disease and should be immediately reported to your veterinarian or the on-site veterinary official. These symptoms include:

- Weakness or incoordination, stumbling, circling
- Blisters on the mouth, muzzle, feet or teats

When your show animal requires treatment, make



**Table 1. Average rectal temperatures and ranges for livestock**

| Species         | Average Temp (°F) | Temp Range (°F) |
|-----------------|-------------------|-----------------|
| Cattle (Bovine) | 101.3             | 98.0 – 102.8    |
| Sheep (Ovine)   | 102.2             | 100.9 – 103.8   |
| Caprine (Goats) | 102.3             | 101.3 – 103.5   |
| Swine (Pigs)    | 102.5             | 101.6 – 103.6   |
| Equine (Horses) | 100.4             | 99.0 – 100.8    |

sure your veterinarian is aware the animal is to be shown so that banned substances are not given, your treatment records can be updated, and all withdrawal times can be followed. Animals with any signs of infectious disease, including warts, active ringworm lesions, pinkeye, footrot, soremouth (also known as orf), or draining abscesses should not be exhibited or allowed on show premises. If your animal becomes ill or exhibits any signs

of disease while at a show, isolate the animal until it can be examined by a veterinarian or removed from the show premises.

## Diseases of Concern for Livestock Exhibitors

A fair or exhibition venue brings many animals and people together in a close environment, increasing the potential for disease transmission. There are several diseases affecting multiple species or single species of animals that are of particular concern in exhibition settings. Some of these diseases are zoonotic, meaning they can be transmissible from animals to humans.

### *Diseases affecting multiple species*

**Brucellosis**, also known as Bang's disease, causes reproductive problems in livestock. It is a zoonotic disease that can also cause illness in humans. Mississippi and surrounding states are free of cattle and swine brucellosis, so there is currently no vaccination or testing requirements for in-state animal movements.

**Tuberculosis** is a zoonotic disease that can cause respiratory problems in cattle, sheep, goats and other animals. Mississippi is free of tuberculosis, so there are currently no testing requirements for in-state animal movements. There is no vaccination against tuberculosis.

**Clostridium** organisms are commonly found in the farm environment and can affect most species of animals. Vaccination is recommended for most livestock species. *Clostridia spp.* cause conditions such as blackleg, enterotoxemia (overeating disease), dysentery and tetanus, all of which can be quickly fatal. *Clostridium perfringens* type C&D is a bigger concern in sheep and goats and causes enterotoxemia. *Clostridium tetani*, the organism causing tetanus, often flourishes in wounds or punctures.

**Leptospirosis** is a disease that can cause many symptoms, including kidney infections, infertility, and abortion in livestock. The organisms causing leptospirosis are commonly found in the environment and can be spread through the urine of many wild and domestic animals. It is zoonotic, and infection usually occurs through contaminated drinking water. Most breeding animals and young stock should be vaccinated.

**Warts** are caused by a virus and are contagious to other animals. They are commonly observed in the head and neck region of show cattle. A vaccine is available, and autogenous (self) vaccines can be made in the face of an outbreak.

**Ringworm** is caused by several types of fungus and causes circular skin lesions on affected animals, especially cattle and small ruminants. It can be spread

easily from animal to animal or through brushes, combs, or contaminated environments. Humans can contract ringworm, so persons handling infected animals should wear gloves and take additional precautions to prevent exposure.

**Pinkeye** causes conjunctivitis and epiphora (excessive tearing) in affected animals. It can be caused by several different bacteria and viruses in livestock and is transmissible by direct contact or through vectors. Fly control and prevention of eye irritation caused by dust and plants are important management practices to aid in the prevention of pinkeye. A vaccine is available for infections caused by certain bacterial pathogens.

### *Diseases affecting specific species*

**Bovine viral diarrhea virus (BVDV)** affects many ages of cattle and can cause several different disease symptoms such as respiratory disease, diarrhea, and reproductive disorders. Some animals may be infected with BVDV and not show any clinical signs; therefore, it is recommended that all show cattle should be tested using the ear notch sample test for BVDV. Some fairs and exhibitions require BVDV testing of cattle, and vaccination is recommended for all ages of cattle.

**Contagious ecthyma**, also known as orf or soremouth, is a contagious and zoonotic viral skin disease primarily affecting sheep and goats. Painful skin lesions and scabs on the muzzle of affected animals may prevent them from eating and drinking. It can be spread easily by direct contact or through contaminated materials. Persons handling animals affected with orf should wear gloves and take additional precautions to prevent infection.

**Erysipelas** is a disease of swine caused by the organism *Erysipelothrix rhusiopathie*, which is commonly found in the pig's environment. Erysipelas can cause inappetence, high fever, lameness, and distinct purple diamond shaped skin lesions in growing pigs, which are most susceptible to the disease. Erysipelas rarely causes lesions in humans that have handled infected pigs.

**Pseudorabies** is a disease of swine caused by a virus (PRV) which can be fatal to baby pigs. It can also cause pigs to bite and scratch themselves, a condition known as "mad itch." Mississippi is free of pseudorabies in domestic swine, but some fairs and exhibitions may require PRV testing of swine.

**Swine influenza** is a respiratory disease caused by a virus that is commonly found in swine populations. Vaccinations are available for several strains of the virus. In rare cases, the virus can mutate and cause disease in humans. Similarly, in rare cases, humans can transmit influenza to swine.





**Equine Infectious Anemia (EIA)**, also known as swamp fever, is an equine disease spread by biting insects. Signs are non-specific and include fever, weakness, and anemia. Some animals may be infected and not show any clinical signs. A “Coggins test” can detect EIA and an official negative Coggins test is required when horses are congregated for exhibitions or shows. A Coggins test is good for one year before a horse must be re-tested.

*Salmonella pullorum* and *Salmonella typhoid* are zoonotic pathogens which can be found in live poultry. Most shows and exhibitions require birds to be negative on the pullorum-typhoid test or originate from a US Pullorum-Typhoid free flock.

## Disease Prevention

Disease prevention begins as soon as you acquire your animal through natural addition (birth) or purchase from an outside source. When purchasing animals, only buy from reputable breeders who follow sound health management and record keeping programs. Having a good herd health program, including biosecurity measures, proper vaccination and parasite (internal and external) control protocols, and good nutrition will help ensure the overall health of the herd. The most common way diseases are spread is through contact with infected animals. This can occur during animal-to-animal contact or contact with equipment or other objects such as shared watering buckets containing infectious organisms.

## Biosecurity

Biosecurity measures are steps taken to prevent the introduction, reintroduction, or spread of diseases in animal populations. It is very important to regularly clean and disinfect all equipment used in feeding your animals (scoops, shovels, buckets, bottles, water troughs, etc.)

and to use separate equipment for feeding and manure handling. New animals arriving at your farm should be quarantined for a period of time, preferably 30 days, to make sure they are not carrying any harmful diseases. Equipment, such as buckets, shovels, manure forks and rakes, wheelbarrows and halters used to care for animals in quarantine should not be used with non-quarantined animals elsewhere on your farm. Animals in quarantine should be cared for and handled after other animals on the farm to prevent any possible disease spread. Clothing and boots used in the quarantine area should not be worn when working with other animals in your herd and should be thoroughly washed and disinfected prior to the next use. Quarantine should also apply to your animals leaving the farm for exhibitions, breeding, or any other reason where they are comingled with outside animals. Discuss with your veterinarian any recommended tests or vaccinations that should be administered to purchased animals before arrival at your farm. In addition to quarantine measures, limit direct contact visitors to your farm have with your animals, especially if they have been on other farms or have traveled outside the country within the past week.

A sound vaccination program should be part of your biosecurity plan. Vaccinations help to prevent disease when an animal is exposed to harmful pathogens. The goal of a vaccination program is to protect your animals from the more common diseases affecting livestock. Vaccinations must be given in the proper manner and at the proper time to be effective. Your veterinarian can help determine which vaccinations are recommended in your particular area and situation. Some general guidelines for livestock show animals are listed in Table 2.

Proper nutrition is the cornerstone of sound animal health management and essential for optimal growth and immunity. Avoiding sudden diet changes in the weeks preceding and during the exhibition will help

prevent diarrhea, acidosis, bloat, and founder. **Diarrhea (scours)** can be caused by many factors in an exhibition environment, including stress, feed or water changes, overfeeding concentrate, illness, or parasites. **Scours** can cause dehydration and lead to more serious ailments. **Acidosis** occurs when there is a sudden increase in lactic acid in the rumen, commonly encountered with the consumption of lush legume pastures or high concentrate diets such as grain finishing feeds. Acidosis often precedes bloat. **Bloat** is a sudden swelling in the rumen of cattle, sheep and goats caused by gas accumulation that results in difficult breathing. Treatment must be administered as soon as possible so the animal does not suffocate. **Founder** is an abnormal growth in hooves caused by eating too much grain, resulting in painful lameness. A sudden increase in grain intake can lead to acidosis, which increases blood flow to the feet, causing the abnormal hoof growth.

Stress, illness, transportation, and any event leading to reduced water intake can lead to dehydration. Livestock show animals are particularly susceptible to dehydration, so it is important to monitor fluid intake and ensure animals are provided with a fresh, ample supply of water. Animals that are dehydrated may be lethargic or less active, appear pale, have tacky, dry mucous membranes and dry or “sunken” appearing eyes, and tight-appearing skin. A veterinarian should be contacted for treatment if severe dehydration is suspected in your

animal. **Drenching should only be done by trained individuals when medically necessary.**

Developing and maintaining a good veterinary-client-patient relationship (VCPR) helps protect your animals’ health. A VCPR exists when your veterinarian is familiar with your operation and knows enough about your animals to be able to prevent, diagnose, and treat medical conditions they may encounter. As part of a VCPR, your veterinarian can make judgments about your animals’ health condition, recommend prevention and treatment options, keep medical records, and be available for follow-up if additional care is needed. A VCPR is also required in many cases for the treatment and dispensing of some medications, including any case where an approved medication is administered off-label.

Exhibiting livestock can be an enjoyable and educational experience. By following some simple recommendations, you can keep your livestock healthy and protect other animals and people from potentially harmful disease.

***General recommendations to follow PRIOR to an exhibition***

- Follow your veterinarian’s recommendations and make sure vaccinations (including necessary boosters) are given at least two weeks prior to the show. Animals should be properly treated for internal and external parasites using recommended deworming and fly control products.

**Table 2. General vaccination guidelines for livestock show animals**

| Type of animal  | Recommended Vaccinations   | Optional Vaccinations   |
|---|--|---|
| Beef breeding cattle  | Clostridium vaccine (7 or 8-way), Respiratory viral vaccine (IBR, PI3, BVD, BRSV), Leptospira spp. and campylobacter vaccine   | Rabies, Mannheimia haemolytica, Warts, Pinkeye  |
| Dairy breeding cattle   | Clostridium vaccine (7 or 8-way), Respiratory viral vaccine (IBR, PI3, BVD, BRSV), Leptospira spp. and campylobacter vaccine   | Rabies, Pasteurella multocida, Mannheimia haemolytica, Warts, Pinkeye, E. coli Mastitis vaccine                                   |
| Market cattle   | Clostridium vaccine (7 or 8-way), Respiratory viral vaccine (IBR, PI3, BVD, BRSV), Pasteurella multocida, Mannheimia haemolytica   | Rabies, Warts, Pinkeye  |
| Breeding sheep and goats (most vaccines are labeled for sheep only) | Clostridium perfringens type C&D, Clostridium tetani (Tetanus), Pasteurella multocida, Mannheimia haemolytica  | Rabies, Contagious echthyma (Orf, soremouth), Chlamydia, Footrot  |
| Market sheep and goats (most vaccines are labeled for sheep only)   | Clostridium perfringens type C&D, Clostridium tetani (Tetanus), Pasteurella multocida, Mannheimia haemolytica  | Rabies, Contagious echthyma (Orf, soremouth), Corynebacterium pseudotuberculosis (Caseous lymphadenitis, CLA), Chlamydia, Footrot |
| Poultry   | Marek’s disease, Fowl pox  |   |
| Market hogs   | Erysipelothrix rhusiopathie (Erysipelas), Bordetella bronchiseptica (Atrophic rhinitis), Mycoplasma hyopneumoniae, Pasteurella multocida, Circovirus, Streptococcus/parasuis, Actinobacillus | Parvovirus, Leptospirosis, Swine influenza, PRRS  |
| Equine  | Rhinopneumonitis (EHV-1 and EHV -4), Equine influenza virus, Encephalomyelitis (Eastern, Western, Venezuelan), Clostridium tetani (Tetanus)  | Rabies Virus, West Nile Virus   |





- Clean and disinfect all equipment such as buckets, shovels, manure rakes and forks, wheelbarrows, ropes, halters, combs and brushes, clippers, etc. prior to leaving home.
- Make sure health certificates or certificates of veterinary inspection (CVI) are current and include proper animal identification, health statements and consignee (destination) information. In Mississippi, health certificates for show animals are valid for 60 days (usually only 30 days for animals not on a show circuit). Always check with your veterinarian for additional information and clarification about specific requirements.
- If traveling across state lines, check the import requirements of the state of destination.
- Several days prior to departure, carefully inspect your livestock trailer to be sure it is in good operating condition (tires, brakes, lights, flooring, safety chains, etc.). Be sure the trailer has adequate ventilation and secure, slip-resistant flooring and that it is thoroughly cleaned and disinfected before and after each use.
- If transporting with other animals, arrange for a drop-off point and prevent haulers with multiple animals from multiple farms from entering your premises.

Know the health and vaccination status of animals that are hauled with yours and avoid contact with all visibly ill animals.

- Make arrangements to bring adequate amounts of feed and forages your animals are accustomed to consuming to accommodate proper feeding throughout the time they are at the exhibition. If the source is questionable, prepare to take your own water.
- Leave companion animals such as dogs and pets at home. In addition to serving as vectors for pathogens, other animals can become stressed themselves and be more susceptible to disease.

#### ***General recommendations to follow DURING an exhibition***

- Limit commingling of your animals with others as much as possible during transportation.
- Keep copies of health certificates, vaccinations records and test results on hand and readily available if needed.
- Keep older animals separate from younger animals as much as possible.
- Provide plenty of fresh water and feed. Avoid changing sources and types of feed and water during





the exhibition. Do not allow manure to contaminate your animals' feed, water, forages, or feeding equipment.

- Don't share equipment with other exhibitors unless it has been cleaned and disinfected between uses.
- Avoid contacting other people's animals and entering their pens. If contact is unavoidable, be sure to wash your hands and shoes frequently.
- Keep unused feed and forages covered to reduce risk of contamination.
- Minimize stress by keeping animals cool, clean, and comfortable. Use recommended fly control products as appropriate.
- Properly dispose of used bedding and uneaten, stale feed.
- Observe animals closely several times a day for illness and immediately report any suspicious symptoms to animal health officials.
- Closely monitor lactating dairy animals throughout the exhibition to be sure they are comfortable with easy access to fresh, clean feed and water. Follow all recommended milking procedures and maintain clean bedding while at the show to help ensure good udder health and high milk quality.
- If your animals show any signs of illness, contact

a veterinary official as soon as possible. To prevent disease spread, limit contact with other animals as much as possible until the animal can be examined by the veterinarian.

- If you, your family members, or other persons in your group become ill or develop unusual skin rashes during the exhibition, avoid contact with animals and promptly seek medical attention.

#### ***General recommendations to follow AFTER an exhibition***

- Properly dispose of leftover bedding, feed and forages at the show facility or dispose of at an appropriate off-farm site before returning home.
- All equipment returning to the farm should be cleaned and disinfected prior to leaving the show facilities.
- Keep fair animals isolated from other animals on your farm for a minimum of 14 days, preferably 30 days.
- Feed, water and tend to animals in isolation last to avoid any possible cross-contamination to other animals.
- Carefully monitor animals in isolation for signs of illness. Contact your herd veterinarian when questions arise.

# Completing the Mississippi Livestock Exhibition Health Form

All exhibitors at the Mississippi State Fair or Dixie National Junior Roundup Livestock Show must document the use of any drugs and/or medications administered to animals entered into these livestock shows by using the appropriate animal health forms from the MSU Extension Service. These forms should be completed and submitted electronically. Hard copies (shown) are available upon request.



MISSISSIPPI STATE UNIVERSITY  
EXTENSION

Record checked by (agent/vet initials and date): \_\_\_\_\_

## Swine Health Record

All market swine shows are below. Swine in each show MUST be listed on separate forms to be turned in at registration.  
CHECK ONLY ONE BOX.  
 Market swine  
 MS bred barrow  
 Commercial

**Exhibitor Information**  
Name(s): Arthur Hoggett Premise ID: XYE40S  
Address: 123 Rex Lane, Champion, MS 39741  
County: Clay Co. Email: a.hogget1234@gmail.com  
4-H Agent/FFA Advisor: Ferdinand Fly  
Exhibitor/parent phone number: 662-345-6789

**Animal Information** Up to 6 animals in the same show exhibited by the same exhibitor may be listed on this form.

All animals to be shown by the same exhibitor or family must be listed. All individual identifying numbers should be listed. Animal names are not acceptable.

| Animal ID #<br>(ear tag or tattoo) | MS-bred ID #<br>(ear tag) | Breed     | Color | Sex | <i>This animal has not received any treatments or medications, including medicated feeds, while under my care unless specified below.</i> |
|------------------------------------|---------------------------|-----------|-------|-----|---|
| 524                                |                           | Chester   | White | M   | <input type="checkbox"/> exhibitor's initials: _____ (check & initial)  |
| 525                                |                           | Yorkshire | White | M   | <input type="checkbox"/> exhibitor's initials: _____  |
| 527                                |                           | Yorkshire | White | M   | <input type="checkbox"/> exhibitor's initials: _____  |
|                                    |                           |           |       |     | <input type="checkbox"/> exhibitor's initials: _____  |
|                                    |                           |           |       |     | <input type="checkbox"/> exhibitor's initials: _____  |
|                                    |                           |           |       |     | <input type="checkbox"/> exhibitor's initials: _____  |

If the animal has not received any treatments, this box should be checked and initialed by the exhibitor. If this box is NOT checked, the animal should be listed under the Treatment Information or Medicated Feeds section.

**Treatment Information** Document ALL treatments, medications, vaccinations, and dewormers and their withdrawal times.

All treatments administered must be listed here. "All" can be specified, and animals do not have to be listed individually, if all animals were treated with the same treatment and dose.

| Animal ID #<br>(may specify "all" for vaccines, dewormers) | Date treatment given | Specific condition being treated | Treatment Administered                |              |                 | Name<br>(Person giving treatment) | Withdrawal time<br>(days) | Withdrawal complete<br>(date) |
|--|----------------------|----------------------------------|---------------------------------------|--------------|-----------------|-----------------------------------|---------------------------|-------------------------------|
|  |                      |                                  | Name of medication, vaccine, dewormer | Amount given | Route of admin. |                                   |                           |                               |
| 527  | 9/10/21              | Scours                           | Neomycin                              | 15ml         | oral            | K. Hoggett                        | 3 days                    | 9/13/21                       |
| 527  | 9/11/21              | Scours                           | Neomycin                              | 15ml         | oral            | K. Hoggett                        | 3 days                    | 9/14/21                       |
| 525  | 9/16/21              | Scours                           | Neomycin                              | 15ml         | oral            | K. Hoggett                        | 3 days                    | 9/19/21                       |
|  |                      |                                  |                                       |              |                 |                                   |                           |                               |
|  |                      |                                  |                                       |              |                 |                                   |                           |                               |

All treatments, medications, vaccinations, and dewormers that have been given to the animal in the last 60 days must be listed here, even if there are no withdrawal times or the withdrawal times have passed.

**Medicated Feeds** Document ALL medicated feeds and withdrawal times. Extra-label use of medicated feeds is prohibited.

All medicated feeds, including feeds containing antibiotics or growth-promoting compounds, must be listed here, even if there are no withdrawal times or the withdrawal times have passed.

| Animal ID#<br>(or specify "all") | Dates fed<br>(from - to) |         | Medication<br>(type/amount added to feed) | Withdrawal time<br>(days) | Withdrawal complete<br>(date) |
|----------------------------------|--------------------------|---------|---|---------------------------|-------------------------------|
| ALL                              | 8/26/21                  | 9/20/21 | Paylean (18g/ton)                         | 0                         | 9/20/21                       |
|                                  |                          |         |   |                           |                               |

The use of all off-label treatments, as well as medicated feeds (with the exception of coccidiostats, dewormers, and repartitioning agents) requires veterinary oversight. If an off-label use is listed, provide the name and phone number of your veterinarian:

I certify that I cared for these animals, they were not fed any "prohibited" mammalian protein (i.e., meat and bone meal), per FDA regulation, CFR Title 21, and I have listed ALL products and treatments these animals received while in my care, or within 60 days for breeding animals.  
Youth Signature: Arthur Hoggett Date: 9/23/21  
Parent Signature: Ken Hoggett Date: 9/23/21

The withdrawal time is the period of time from the last treatment until the animal can be marketed for harvest.

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Both the youth exhibitor and the parent/legal guardian must sign this section as an affidavit that all treatments have been listed and that no prohibited materials have been fed to the animal while under their care. Any treatments administered AFTER this affidavit is signed must be listed on this or another attached form with appropriate withdrawal dates listed.

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