



STATE OF WASHINGTON

## DEPARTMENT OF AGRICULTURE

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# Cattle Diseases of Concern at Fairs and Exhibitions

## From the State Veterinarian

### Fair Managers and Beef and Dairy Department Superintendents

Please read this important information about several diseases of concern and share with cattle exhibitors before upcoming fairs and exhibitions. These diseases are highly contagious and can spread readily where animals congregate. Please closely check the health of cattle at entry and during exhibition; encourage exhibitors to monitor their animals for signs of illness after the event and contact you and their veterinarian if their animals become ill after returning home. Maintain records after your events so exhibitors can be contacted easily in the event of a disease outbreak. Thank you for doing your part to safeguard the health of cattle in Washington State!

### Introduction

Several contagious diseases can spread wherever cattle congregate. These include those detailed in Table 1 below and several others. Visible skin diseases such as warts and ringworm also create a public perception concern. Cattle staying home alone or with established populations of other cattle are at little risk of these diseases. Those transported for shows, breeding, rodeos, or other situations where animals from various areas have contact with each other are at increased risk for these and other diseases. A certificate of veterinary inspection (CVI) is required for most cattle traveling interstate for shows and exhibitions; a CVI indicates the animal has been examined and appears healthy, which helps reduce spread of highly contagious diseases. Table 1 lists the causes, means of transmission, signs of illness, prevention methods, zoonotic potential, and relevance to fairs for some diseases of most concern. *Please also read the separate fact sheet on malignant catarrhal fever, which is a critical issue for livestock fair management and planning.*

Note concerning dairy cattle: if communal milking machines or a communal parlor will be provided at the fairgrounds, it is essential to work with a veterinarian to develop an effective sanitization protocol to use between animals. Several types of contagious mastitis can be transmitted from infected individuals and create new cases if milking equipment is insufficiently sanitized. Exhibitors must be trained regarding required sanitization steps.

### **Animal identification requirements**

To assist with tracking the location of exposed animals in the event of a disease outbreak, cattle and bison moved interstate must be officially identified and accompanied by a CVI. Beef cattle under 18 months of age, unless they are moved interstate for shows, exhibitions, rodeos, or recreational events, are exempt from this official identification requirement.

### **Biosecurity measures for fair managers**

1. Do not let animals with questionable health or body condition score enter a fair or exhibition.
2. Whenever possible, use metal vs. wood for animal stalls to enable better disinfection.
3. Discourage exhibitors from going in and out of others' pens, sharing clippers or other equipment, or contacting others' animals.
4. Encourage appropriate pre-event vaccinations for diseases of concern.
5. Provide handwashing stations and hand sanitizers for exhibitors and the public.
6. Monitor animal health throughout the event.
7. Contact a veterinarian if animal health concerns arise.
8. Establish an isolation area for animal disease suspect cases.
9. Thoroughly clean and disinfect all surfaces before and after an event.
10. Do not house young weaned animals with adult animals.
11. Instruct exhibitors how to fill water buckets using communal hoses without contaminating each bucket.
12. Provide solid-sided pen partitions unless ventilation will be compromised.
13. Discourage nose-to-nose contact between animals from different farms.
14. Keep distance between market and breeding animals.
15. Have exhibitors provide their own feed and water buckets for each pen.
16. Ensure effective amount and direction of ventilation (see MCF publication).
17. Discourage the public from touching exhibited animals.
18. Do not allow eating, drinking, smoking, strollers, or pacifiers in barns.
19. Control wild birds, flies, and rodents as much as possible.
20. Maintain exhibitor records to be able to communicate with exhibitors regarding any post-event outbreaks.
21. Be sure exhibitors disinfect wash racks where heads are tied between animals.

### **Effective cleaning and disinfection steps**

Thorough cleaning and disinfection are important steps to reduce the risk of infectious diseases. A veterinarian can help select the most appropriate disinfectant. Follow these steps for effective disinfection:

1. Remove all visible debris (manure, bedding, dirt, feed, etc.).
2. Thoroughly clean all surfaces with soap and water.
3. Rinse well and let dry.
4. Apply an appropriate disinfectant at the proper concentration for the recommended contact time.
5. Rinse and let dry before using equipment or restocking premises with animals.

### What to do if a cattle disease outbreak occurs at a show?

- Contact your local veterinarian, or the state veterinarian at 360-902-1878. To protect animal health and control the outbreak, a decision may be made to isolate animals at the fairgrounds.
- After emptying infected barns, remove manure and bedding from stalls and compost on site if possible. Clean and disinfect all surfaces thoroughly.
- Notify all exhibitors who visited the premise in the 14 days before an outbreak that an outbreak has occurred and they should contact their veterinarian for guidance.

### Conclusion

The diseases mentioned in this publication are highly contagious and can cause severe illness and even death; some are even contagious to humans. Prevention steps include enacting effective biosecurity steps daily, excluding visibly ill or affected animals from fair entry, monitoring animals closely for signs of illness, possible preventative vaccinations, and close contact with knowledgeable veterinarians. Show animals are at even greater risk of infection due to increased stress and pathogen exposure, so fair managers and superintendents must keep these and other contagious diseases in mind when managing exhibitions.

If you have questions about cattle health in Washington State, please contact the state veterinarian at 360-902-1878 or [ahealth@agr.wa.gov](mailto:ahealth@agr.wa.gov) or your local veterinarian.

### Additional Resources

<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/cattle-disease-information>

<https://agr.wa.gov/departments/animals-livestock-and-pets/animal-health>

[www.cfsph.iastate.edu/Disinfection/index.php](http://www.cfsph.iastate.edu/Disinfection/index.php)

<http://www.cfsph.iastate.edu/Species/bovine.php>

#### CRITICAL ADVICE FOR EXHIBITORS

- Only take healthy animals to shows or fairs.
- Quarantine new or returning animals from home herd for 30 days; take temperature twice daily and monitor for signs of illness.
- Perform home herd chores first. Use separate equipment, footwear, and clothing for quarantined animals. Wash hands after handling each animal.
- Isolate sick animals and contact a veterinarian about them.
- Clean and disinfect equipment.
- Vaccinate for relevant diseases.
- Minimize stress for animals at home or away.
- Provide excellent nutrition at all times.

#### **Revised Code of Washington (RCW) 16.36.082: Infected or exposed animals—Unlawful to transfer or expose other animals.**

It is unlawful for any person with an animal having any contagious, communicable, or infectious disease to knowingly stable the animal or allow the animal to be stabled in any barn with other animals without notifying the other owners.

**Table 1.** Comparison of the disease characteristics of Bovine Viral Diarrhea (BVD), Warts, Ringworm, and Bovine Respiratory Disease Complex (BRDC).

	<b>BVD</b>	<b>Warts</b>	<b>Ringworm</b>	<b>BRDC</b>
<b>Cause</b>	Bovine viral diarrhea virus	Bovine papilloma virus	Various fungi in the <i>Trichophyton</i> and <i>Microsporum</i> genera.	Combination of viruses and bacteria, including BVD, Infectious Bovine Rhinotracheitis (IBR), Parainfluenza Type-3 (PI-3), and Bovine Respiratory Syncytial Virus (BRSV) viruses and <i>Mannheimia haemolytica</i> , <i>Pasteurella multocida</i> , <i>Histophilus somni</i> , <i>Mycoplasma bovis</i> , and other bacteria secondarily.
<b>Transmission</b>	Infected needles or tools, in utero, via breeding, direct contact with infected animals, biting insects?	Direct contact with infected animals or contaminated environments or grooming tools.	Direct contact with infected animals or contaminated environments or grooming tools. Flies?	Depends on pathogen and includes infected needles or equipment, breeding, aerosolization, direct contact with infected animals or their secretions.
<b>Signs</b>	Extremely variable: fever, poor appetite, bloody diarrhea, abortion, respiratory distress, oral ulcers, poor conception rates.	One to hundreds of raised gray skin growths, usually on head or neck. Can be on teats.	Non-itchy hairless, scaly, or crusty gray patches, especially on head and neck.	Fever, coughing, respiratory distress, elevated respiratory rate, nasal discharge, poor appetite, death.
<b>Prevention</b>	Effective vaccination program; no re-use of needles or rectal sleeves; no pooling of colostrum; AI from negative bull stud.	Environmental sanitation, metal vs. wooden facilities, no overcrowding, minimize stress. Commercial and custom vaccines available and effective before warts develop. Disinfect tattoo gun and ear tagger between uses; use needles only once; have designated grooming tools and disinfect after use.	Good nutrition, sunshine exposure, environmental sanitation, metal vs. wooden facilities, no overcrowding, minimize stress. Have designated grooming tools and disinfect after use. No vaccine available in the U.S.	Multi-factor vaccines available; should be boosted one month before anticipated risk. Good nutrition, no overcrowding, avoid wetness/chilling, good ventilation and air quality, low-stress weaning, handling, and transport.

<b>Relevance to fairs</b>	Persistently-infected (PI) cattle can put others at risk through viral shedding, which can be increased during stressful periods such as exhibitions.	Animals with visible warts should be denied entry unless fair veterinarian rules otherwise. Fairgrounds are probably already widely contaminated with the virus.	Animals with visible lesions should be denied entry unless fair veterinarian rules otherwise. Fairgrounds are probably already widely contaminated with the fungus.	Fair animals are at high risk: stressed during transport and at fair; exposed to new cattle and pathogen strains; often hot fair weather. Risk increases with duration of event and multiple exhibitions for an animal.
<b>Human health concern?</b>	No	No	Yes	No
<b>Notes</b>	Consider requiring pre-fair testing to detect PI animals or encourage exhibitors to only purchase PI market or breeding stock. Consider requiring proof of vaccination to allow animal to enter event. Control flies and biting insects on fairgrounds.	Usually a youngstock problem. Very common condition. Should be recognized, treated, and resolved well before exhibition. All warts usually regress after removal of one or more. Attention to biosecurity can reduce transmission throughout herd.	Very common condition. Should be recognized, treated, and resolved well before exhibition. Most facilities and environments that have housed livestock are contaminated with ringworm fungi. Most cases self-limiting/self-curing and occur in youngstock; immunity develops.	Vaccines very effective. Dairy and breeding beef cattle should be boosted/up-to-date on vaccinations before event; must consider vaccine withholding period when boosting market cattle.