

EHV (Equine Herpes Virus) Management

To: All North Dakota horse owners and equine event managers

Because the equine herpes virus (EHV) is a concern for North Dakota 4-H families and horse owners across the state who are gearing up for summer events, county fairs and horse clinics, horse owners and event manager need to consider their options. Responsible horse owners and exhibitors are responsible for helping protect the horse industry with a proper biosecurity plan. Likewise, event managers should have a proper biosecurity plan in place prior to the event.

EHV exposure and infection in the U.S. horse population is common. The prevalence of sero-positive (meaning antibody present in the bloodstream against EHV), whether through vaccination or natural exposure, is likely above 80 percent. EHV, by its nature, tends to hide in the body and may reappear during periods of stress, such as commingling at shows and rodeo events. This means that exposure and infection to the virus is common.

The main defense against clinical disease (meaning a horse that's sick, or has a fever or other abnormal signs associated with EHV) is a proper biosecurity plan and a current vaccination program for the animals. Vaccination does not prevent exposure or infection. However, vaccination reduces the amount of virus shedding and the duration of the virus being transmitted to other horses. Additionally, in immunized horses, the duration of illness and clinical signs will be reduced.

Primary indications for the use of equine herpesvirus vaccines include prevention of EHV-1-induced abortion, and decreasing the severity and duration of signs of respiratory tract disease (rhinopneumonitis) in foals, weanlings, yearlings, young performance and show horses that are at high risk for exposure. Repeated vaccinations appear to reduce the frequency and severity of the disease and limit the occurrence of abortion storms. As with all forms of the equine herpes viral disease, biosecurity management is of primary importance for control of abortion caused by EHV-1.

The following are the AAEP (American Association of Equine Practitioners) recommendations for managing EHV in horses:

Vaccination schedules:

- I. Adult, nonbreeding horses previously vaccinated against EHV: Frequent vaccination of non-pregnant, mature horses with EHV vaccines generally is not indicated because clinical respiratory disease is infrequent in horses more than 4 years of age. In younger/juvenile horses, immunity following vaccination appears to be short-lived. Veterinarians recommend that the following horses be revaccinated at six-month intervals:
 - a. Horses less than 5 years of age
 - b. Horses on breeding farms or in contact with pregnant mares

- c. Horses housed at facilities with frequent equine movement on and off the premises, thus resulting in an increased risk of exposure
- d. Performance or show horses in high-risk situations, such as racetracks. Vaccinations more frequent than at six-month intervals or a booster dose may be required or highly recommended in certain cases as a prerequisite for entry to the facility.

None of the available vaccines have a label claim to prevent the neurologic form of EHV-1 infection. Some research suggests that vaccines may assist in limiting the spread of outbreaks of EHM (equine herpes myeloencephalopathy) by limiting nasal shedding of EHV-1 and dissemination of the infection. The vaccines with the greatest ability to limit nasal shedding and viremia of the neuro virulent strain include the vaccines licensed for control of abortion (Pneumabort-K® and Prodigy®) and the modified live vaccines (Rhinomune® and Calvenza®).

Should I still host my horse event?

On a countywide or regionwide basis, the following recommendations should guide your decisions:

- If you have no reported cases in your area and no horses coming to your show have traveled recently to other shows and rodeo events, you should go ahead with your events. Even in this case, I would recommend that all horses be up to date on EHV vaccinations. Safety and precautions always are recommended, even when an outbreak has not occurred.
- Biosecurity is important at all times. Biosecurity guidelines can be found on the [NDSU 4-H Horse Events](http://www.ndsu.edu/4h/programs_events/state_4_h_contests/horse_judging/) website (www.ndsu.edu/4h/programs_events/state_4_h_contests/horse_judging/) and the [North Dakota Department of Agriculture](https://www.nd.gov/ndda/disease/equine-herpesvirus-1) (NDDA) website (<https://www.nd.gov/ndda/disease/equine-herpesvirus-1>). Note that not all EHV-1 cases are reported to local or state veterinarians. Therefore, EHV-1 is more probable and common than what is reported to local and state veterinarians.
- In areas where attending horses have participated in events in which a positive diagnosis has occurred, additional caution is in order. Discourage horse owners from attending your events unless at least three weeks have elapsed since a potential exposure (i.e. advertise on your flyer: Biosecurity comes first! Please do not attend this show if your horse has had EHV-1 or a horse at the same facility as your horse has had EHV-1 within three weeks from the date of this event).
- Request that all horses are *current*, meaning they've been vaccinated within six months of the show, and if not, they've had a dose given at least six weeks prior to the show, with a booster dose administered at least three weeks prior to the event (this too can be highlighted on the flyer/in an email/on social media for your event). The logic here is to build herd immunity (increasing the percentage of immunized horses in the event population) to reduce shedding of the virus and the number of animals that may develop the disease. Horse owners should check with their veterinarian about vaccine availability, handling and usage.

- Of course, remember that no horses demonstrating clinical signs of illness should be allowed on the premises.

As a show manager, you have the ability to require additional information as animals enter your event. As you prepare for your event, you can advertise these additional requests. For example:

1. Have any cases of EHV occurred in my county?
 - a. Yes - Positive EHV diagnoses have been made in my county.
 - i. Cancel your event if you feel other horses in the area may be affected
 - b. No - No confirmed cases of EHV have been found in my county.
 - i. Show management should recommend biosecurity plans to exhibitors (examples are on the NDSU 4-H Horse Event and NDDA websites)
 - ii. Show management can request that horses from counties with reported EHV do not attend the event **or** if four weeks have passed since EHV has been reported in their county, as the event manager, you can decide to allow them to attend your event because EHV risks are significantly reduced after a 28-day incubation period (but not guaranteed).
 - iii. Show management can recommend all horses attending their event are current on EHV vaccinations within six months of the event, suggesting a three-week booster shot prior to traveling to the event.
 - iv. Show management may recommend/require a health certificate (CVI; certified veterinary inspection) with a 10- or **seven-day issue** requirement to attend the show.
 1. Ask a veterinarian to attend the event to look for illness and check CVIs as horses enter the event premises.
 2. Horses demonstrating clinical signs of illness should be asked to leave the premises and return home, advising them not to travel for 21 days.

Should I attend a horse show in North Dakota with the recent EHV outbreaks?

Ultimately, this is your decision. Anytime you travel to an event, a risk of illness or injury exists. You should consider the event you are traveling to and the location of the event. Assess what the show management is requiring for horses as they enter the premises so you are prepared should they require additional documentation.

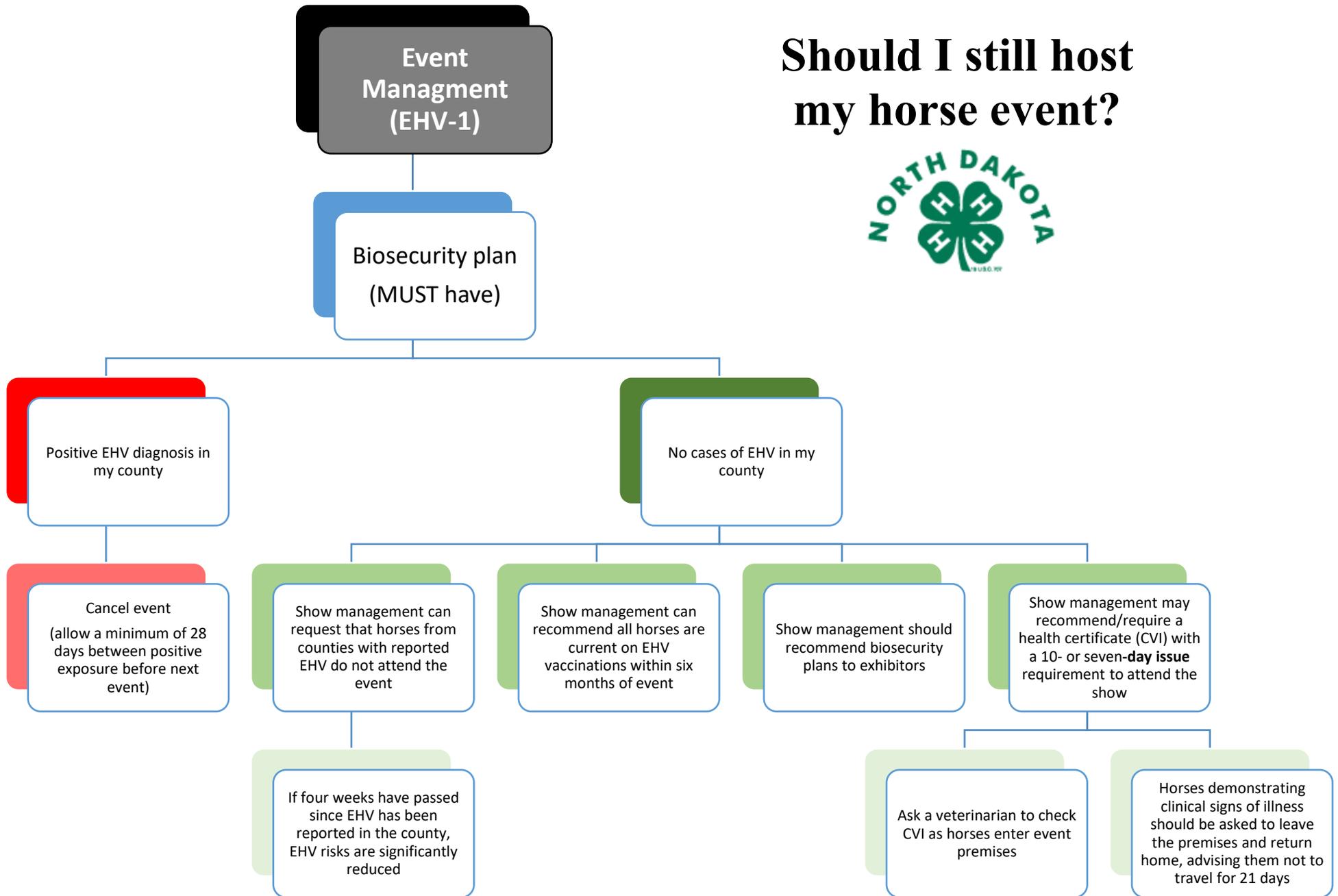
Investigate if show management are taking additional precautions to limit horses in exposed areas from attending their event. Is the event being held in a location where an outbreak has been reported? How long ago was the report confirmed? The American Association of Equine Practitioners (AAEP) EHV Control Guidelines suggest a 28-day isolation is a better timeline to reduce the risk of exposure.

If your horse has exhibited any signs of illness, you should not travel within a minimum of 28 days from the onset of clinical signs. As a responsible horse owner, you are obligated to help reduce the spread of disease and implement the proper biosecurity plan for the health of your animals and others' horses.

Make sure your horse is vaccinated properly if you decide to travel. You also should:

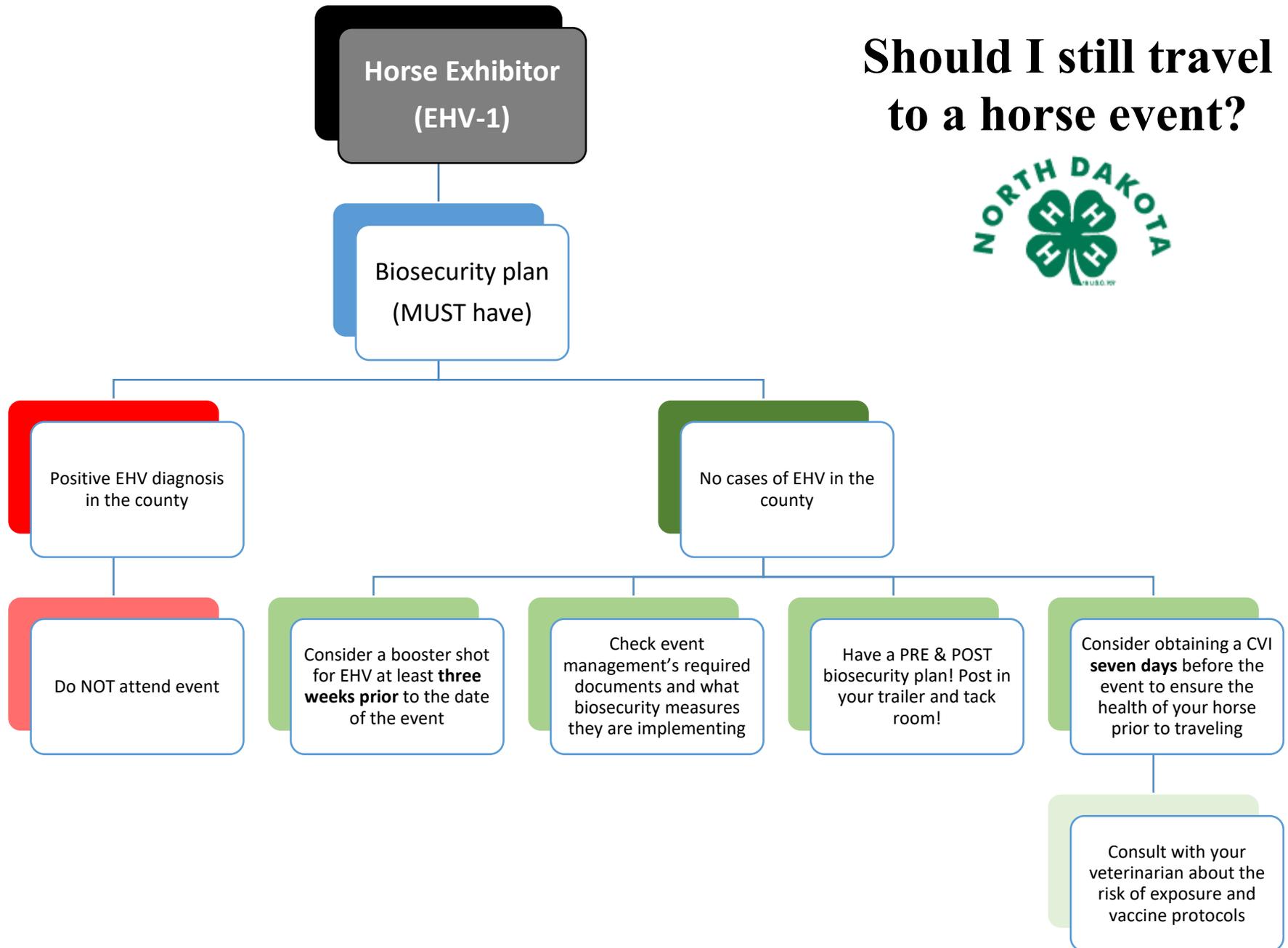
- Consider a booster shot for EHV at least three weeks prior to the date of the event.
- Consider obtaining a CVI seven days before the event to ensure the health of your horse prior to traveling.
- Most importantly, consult with your veterinarian about the risk of exposure and vaccine protocols, and have a biosecurity plan and biosecurity checklist for pre- and post-events to maximize the health of your animals and the horse industry.

Should I still host my horse event?



Protect the equine industry with biosecurity!

Should I still travel to a horse event?



Protect the equine industry with biosecurity!