EHV-1 Outbreak

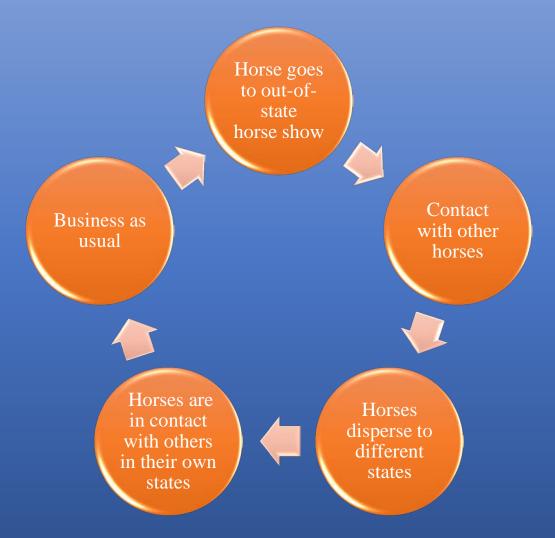


Dr. Alexandra Eckhoff New Mexico Livestock Board July 28, 2016

Equine Herpes Virus-1

- Viral disease
 Neuropathogenic
 Non-neuropathogenic
 Transmission: direct/indirect
 Incubation: 2-10 days
 Clinical signs:
 Respiratory: fever >102° F (1-7 days), coughing, depression, inappetence, and nasal discharge.
 - Reproductive: abortion (months 7 and 11 of gestation, about 2-12 weeks post-infection).
 - Neurologic: mild incoordination, hindlimb paralysis, recumbency, loss of bladder and tail tone.
- Diagnosis: PCR nasal swab, whole blood
- Treatment: supportive

Normal Movement of Animals





Why Issue a Quarantine ?



Misery Loves Company



- Natl. Cutting Horse Association April 29- May 8, 2011
- More than 400 horses exposed in 19 states
- •1635 horses at risk for secondary exposure
- •90 confirmed cases in 10 states, 13 dead horses
- Of the 90 confirmed, 54 had been at show

2016 EHV-1 Outbreak

How it all began First confirmed case 1/21/2016 >By 1/22/2016, 4 quarantined facilities Approx. 3000 horses under quarantine **Diagnosis Clinical signs PCR** on whole blood and nasal swabs

2016 EHV-1 Outbreak **Establishing a Plan** >Test and isolate based on clinical signs Fever Neurological signs **Isolation barn on site** Individual quarantined barns within a quarantine **Biosecurity protocols** Twice daily temperatures **Disinfection PPE**

Explaining the Importance of Biosecurity

- Highly contagious : aerosol and mechanical transmission
- Horse owners and trainers urged to take biosecurity measures
- Cleaning and disinfecting surfaces or items horses come in contact with
- Controlling foot, vehicle, and pet traffic on the racetrack grounds
- Wearing plastic boot covers, sanitizing footwear and clothing



2016 EHV-1 Outbreak Communication No news is not good news Education and outreach to trainers and owners Media communication



EHV-1- Lessons Learned

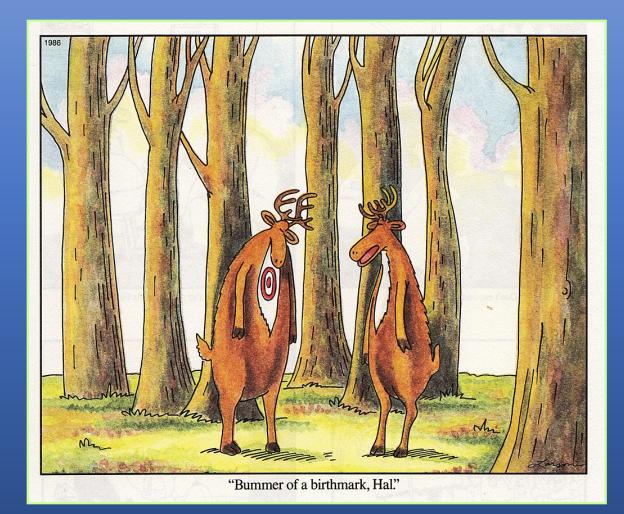


Clear misconceptions

- The disease cannot be explained enough
- Should horses train or not?
- Swabbing for surveillance testing?
- How long is testing necessary?
- Quarantine release?

The Cost of EHV-1 **Traceability** 1632 horses on Sunland Racetrack > Approx. 700 horses that had moved or were in adjacent facilities **Total tally** >73 confirmed positive horses > 12 neurologic cases >7/12 recovered Euthanasias ► 6/11 clinical signs ► 5/11 owner's request

New Mexico January 21, 2016-March 9, 2016



The Cost of EHV-1 **Personnel** NMLB, NMDA, NMSU, ALIRT vets, **NM State Police Mileage** >13,000 miles >\$6,000 in fuel **Time** >Over 1,000 hours worked >Over 40 hours of conference calls

The Cost of EHV-1

Testing- NMDA VDS
 407 blood samples
 413 nasal swabs
 \$36.50/sample

ALIRT Vets
Deployment of 4 vets
Approx.1,000 miles
Approx. 60 hrs.



The Stress of EHV-1

 On the Animal Side
 Worst outbreak in New Mexico history
 Risk to interstate movement
 On the Human Side
 Mechanical transmission from human to horse



Prevention

limit exposure, isolate, avoid contact between sick individuals, biosecurity

What If...?

Risk to Interstate Movement Loss of confidence and acceptance of equine imports to other states Risk to the national racing industry Risk to breeding facilities Impediment to any equine events Economic impact to the equine industry and agrotourism Loss of credibility and reputation at a national and international level



Fiscal Impact

Agency 508 Costs Related to Sunland Park EHV-1 Quarantine					
January thru February 2016					
Personnel Hours				Expense	
Inspection Staff	1,022 hrs			33,851	
Veterinarian Staff	204 hrs			9,458	
Administrative	175			10,435	
			\$	53,744	
Staff Travel					
Per Diem	3,029		\$	3,029	
Vehicle Use					
Mileage	16,765		\$	7,712	
Contract Veterinarian Staff					
Contract Costs	5,747			5,747	
NMDA Testing	29,930			29,930	
			\$	35,677	
Supplies					
Supply Cost	1,079		\$	1,079	
		Total Expense	\$	101,241.00	



