# Biosecurity

It is all about choices



# Biosecurity begins at Home



## Nutrition is Key for Healthy Immune System

- Water: Abundant, Clean, Warm
- Hydration is critical
- Horses like warm water





## Digestible Fiber





Availability; Quality; Quantity

### Meal Size & Rate of Intake



#### **Balanced Diet**

- Protein & Carbohydrate
- Major minerals: Ca; P;Mg; K; Na; Cl
- Trace minerals: Cu; Zn; Se
- Vitamins: A; D; E; K; C

- Alfalfa good source of protein,
  Ca, Mg
- Choose Supplements for Trace minerals & vitamins – Limit number of supplements
- Grass hay can be highly variable
  Consider testing;
  Watch: moisture, fiber, protein, major minerals, trace minerals

#### Nutrient Requirement 1100# horse/maintenance

Digestible Energy (DE)

16.7 Mcal

• Crude Protein

630 grams

Lysine

27.1 gram

• Calcium (Ca)

20 gram

Phosphorus (P)

14 gram

Sodium (Na)

10 gram

• Iron (Fe)

400 mg

• Zinc (Zn)

400 mg

Copper (Cu)

100 mg

• Selenium (Se)

1.0 mg



#### Vitamins

• Vitamin A

• Vitamin D

• Vitamin E

Vitamin K

• Vitamin C

• B vitamins

**10 KIU** 

**10 KIU** 

2-3 KIU

1-5 gram



# Bring your own Feed



#### Vaccinations and Parasites

- Be up to date with vaccines
- Allow immune system to respond before leaving home
- How many? How often? Other considerations?
- Flu/Rhino, Strangles
- Core Vaccines (Tetanus, EEE/WEE, WNV, Rabies)
- Check for skin issues
- Run fecal and practice parasite control
- Leave questionable horses at home
  - ? Monitor Temp 2X/day



#### Travel

- Be Clean, Practice Low stress hauling
- Bring all your own equipment: Wheel barrow, feed and feed buckets, water buckets, hose, forks, brushes, tack and so forth. Do Not Share
- Be aware of any regional issues





## Arrival at Event

• Leave Horses in the Trailer

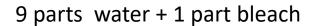


#### Arrival

- Inspect the grounds
- Inspect the stalls; Clean stalls, Remove water buckets, feed buckets, anything that looks dirty. After cleaning apply disinfectant.
- Clean the stall if needed check for "Horse Boogers"
- Add your own clean water buckets and feed racks or nets
- Examine Air flow in barn: Know what is upwind
- Use your own water hose and NO hose placed in bucket
- Know event isolation procedures if something goes wrong

## Clean; then Disinfect







Generally use 1% solution

# Keep Hands Clean



## Horses at Risk









## Wash Racks





# Stalls: Open, Air flow, Contact



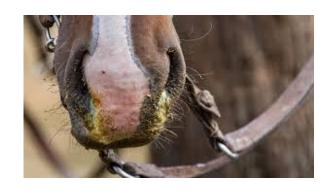


### Biosecurity at Equine Events

- A disease related "perfect storm" occurs when risk factors and a pathogen successfully interact, resulting in the introduction and spread of an infectious organism among a susceptible population.
- This can happen when:
  - Susceptible, stressed horses are exposed to an infectious agent
  - Conditions & environment at the event support transmission and infection
  - The pathogen spreads rapidly throughout the animal population

# Equine influenza virus – Western WA

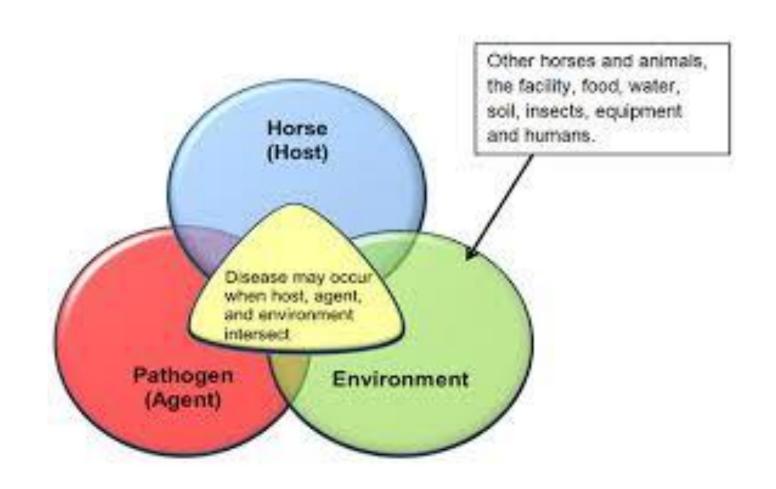
- Lynden Fairgrounds Horse Show November, 2018
- EIV positive horses in at least two stables, highly suspected at a third stable
- Extensively shut down Equine activities of all sorts in Whatcom county
- Monetary impacts:
  - Lost training, shows, lessons, travel
  - Testing, treatments, containment, labor, biosecurity measures
- Fortunately no loss of life or future performance abilities







## The Disease Triangle



#### Return Home

- Clean and disinfect your trailer, tack, equipment
- Ideally separate those returning from the others for 7 or more days

 Shower, change into clean clothing, clean & disinfect boots before attending to any horses left home

 Following days take care of the horses left home and then care for those who were at the show. If any exhibit sign of illness double up on your efforts to not carry disease to any other horse.

# Heading Home





# A better Day



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