



Highly Pathogenic Avian Influenza (HPAI) has been positively diagnosed in the central valley. We want to be a tool for our clients to help prevent misinformation and help in any way we can. Much about HPAI is still unknown, but what we do know is that it is shed in very large numbers in milk, and at this time the virus has been spread mostly by animal transport. We have built some guidelines for our clients to help best protect themselves. Please reach out to us with any concerns or questions. While it is highly unlikely that we would spread the virus we are taking many precautions to ensure that we are never a risk to our clients. These are some of the things that we are doing/ continuing to do to help promote clean and bio secure environments:

- Communicating with clients about their expectations and requests
- Washing trucks daily and in between clients
- Cleaning tool belts and syringes between each location, allowing proper time to disinfect
- New coveralls and boots at each location
- We scrub boots after each call but will be spraying of disinfectant after washing
 - We can also leave our boots on the farm and only use that pair for your location, ask your herd veterinarian about options
- Spraying tires with disinfectant prior to leaving each location

As always feel free to reach out to your herd veterinarian with any questions.



Avian Influenza in Dairy Cattle (HPAI)

- Symptoms in Cattle:
 - Changes in milk appearance
 - Thicker, concentrated, colostrum like milk
 - Could also be watery milk
 - Change will be in all 4 quarters
 - Abnormally tacky or loose feces, lethargy, dehydration
 - Fever following infection
 - Cows go off feed or decrease feed intake
 - *Herds have been infected for 10-14 days by the time clinical signs show*
- Prevention- prior to having HPAI
 - Backflush all machines between cows (25-50 ppm iodine @pH<3.5)
 - Change towels between each animal
 - Workers need appropriate PPE
 - Safety glasses or face shields and gloves
 - Signs and symptoms of human cases are mostly eye redness, but can cause upper respiratory symptoms, ect.
 - Good biosecurity measures
 - Limit farm visits to required personnel
 - Don't bring animals of any species on farm
 - If non-lactating animals must be brought on farm quarantine for at least 30 days at a separate location
 - Wash and disinfect boots prior to leaving and returning to farm
 - Many chemicals are effective against the virus, speak to your vet about the best virucide for your operation
 - Virus is shed in the milk in high concentrations be extra cautious when handling unpasteurized milk
 - +/-Charcoal or other binder in feed and electrolytes in water troughs
 - To trace the virus and prove prior negative, take daily bulk tank samples, label them well and freeze them for future reference
- Treatment Recommendations:
 - No treatment will cure the virus, supportive care is all we can offer
 - It is crucial to not stress the animals any more than necessary
 - Mild/minor treatment:
 - Aspirin
 - Feed binder
 - Electrolytes in water troughs
 - +/-Probiotic and/or vitamin pill
 - Severe/ Aggressive treatment
 - Daily administration of fluids
 - Oral fluids with electrolytes 5 gal of oral fluids with electrolytes
 - 2 L of Hypertonic Saline IV (with access to water)
 - Milking affected animals
 - Milk is the number one vector and contains high virus numbers
 - If animals can be isolated, separate them and milk them last
- Other
 - Clinical animals cannot be sent to beef, as of now nonclinical, animals can safely be sent to slaughter