

Northern Valley Livestock Services

J. Bennett, DVM P. Seckerson, DVM M. Weisenbeck, DVM J.Brown, DVM N. Mader, DVM N. Laurence, DVM

H5 N1 Influenza outbreak in cattle update 4/4/24

Today USDA announced that five more herds in Texas and one in New Mexico have tested positive for H5 N1 Influenza. The total number of positive herds by state is now: seven in Texas, two in Kansas, one in New Mexico, one in Michigan, and possibly (still waiting for results) in Idaho. Sick cats from one or more affected farms have also tested positive for the virus. There are many more farms that have reported symptoms, but have not reported positive tests. One farm worker has become ill and tested positive.

While we still have more questions than answers we do know more than we did. First, USDA is saying cow to cow spread cannot be ruled out. However, if spread is occurring, the means of spread is still unknown. Flu viruses have an affinity for mucosal (lining) surfaces, and in cattle it seems to concentrate in the mammary gland. This could explain why older cows (with more mammary tissue) are more likely to show clinical signs. While we tend to think of flu spreading between humans by respiratory means, it is more likely to be spread by rubbing one's eyes with fingers contaminated by virus. If the virus is spreading cow to cow, we should assume one means is through milk in the milking parlor. The virus is very sensitive to most disinfectants, or even just drying out; however, it can be protected by biofilms. In poultry one of the last places for virus to be eliminated is biofilms in waterers. To control an outbreak we want to limit the amount of virus available and limit exposure to naïve animals. The course of the disease is reported to be about two weeks, with the most severe effects coming two to five days after signs begin. Mortality is very low, and cows do develop antibodies to the disease. Early detection in any herd can help reduce the spread within the herd, and ultimately reduce losses. Pasteurization does kill the virus, but pasteurization is not sterilization, so it probably does not kill all the virus.

Here are some recommendations:

- 1. If you suspect you have infected animals, please call us. This is especially true if you see dead birds and dead cats on your farm.
- 2. Should an outbreak occur, try to limit introduction of new or unaffected animals into the herd. We know this is difficult to do, in particular when one has unaffected heifers calving and being moved into the milking string.
- 3. Should an outbreak occur, clean and scrub waterers frequently, even daily. Adding a disinfectant may help, but it is probably more important to remove biofilms.
- 4. Up your herd biosecurity. Do not just let anyone come into your barns; have visitors disinfect boots, and wear clean (not on another dairy) clothes. Don't let cattle into your herd that have been in a dirty trailer.
- 5. If an outbreak occurs try to milk affected cows last by segregating them into the hospital pen. Dump milk from infected cows; do not feed it to calves even if pasteurized.
- 6. Have workers change into clean clothes before going home as to not bring the virus home.



Northern Valley Livestock Services

- J. Bennett, DVM P. Seckerson, DVM M. Weisenbeck, DVM J.Brown, DVM N. Mader, DVM N. Laurence, DVM
- 7. Wear gloves, especially in the parlor, but also when handling cows or manure or manure laden surfaces. Gloves protect humans from infection because we do not like to rub our eyes with a gloved hand.
- 8. Consider milk to be a likely source of infection, so should an outbreak occur parlor workers should be considered at higher risk. Gloves, goggles, or disposable clothing might be good options.

We are providing this information to help protect your animals, your families, your workers, yourselves, and your markets, but please understand these recommendations WILL CHANGE as we learn more. Thank you.

NVLS Doctors