

Ask A Vet: New Swine Disease Causes Jump in Pork Prices

Sunday, April 6, 2014

Dear Dr. Weldy's,

Our 4-H kids have been hearing a lot about PEDV at their swine meetings. Could you please fill us in what this is and what it means to us showing pigs and eating pork?

- Concerned

Dear Concerned,

This is a very good question as I too have been getting a lot of questions about it and what it means to the average consumer. First let me say this is a disease that ONLY infects swine and there is NO food safety concerns when consuming pork. It is NOT a notifiable disease by the World Health Organization of Animal Health and is NOT considered a foreign animal disease by the USDA. Now let's talk about what PEDV is.

PEDV is Porcine Epidemic Diarrhea Virus and is a member of the family Coronaviridae. Other viruses included in this family are TGE (transmissible gastroenteritis virus), PRCV (porcine respiratory coronavirus) and HEV (porcine hemmagglutinating encephalomyelitis virus). PEDV was first reported in the United States in 2013 but has been found in Hungary, Germany, China, Korea and Japan. China has reported increased outbreaks more than likely due to new strains.

Clinical signs of the disease are variable but acute outbreaks of severe diarrhea and vomiting, inappetance can affect up to 100% of the herd that have never been exposed to it. In suckling pigs you will see watery diarrhea, dehydration and metabolic acidosis in 50-80% of them. In feeder and grower pigs, you will see diarrhea, loss of appetite, depression with high morbidity but low mortality (1-3%). Average mortality or death loss is 50% but as high as 100% in pigs suckling under 7 days of age. Those that are over 7 days generally recover. In herds where it is being harbored or endemic, the signs are generally limited to suckling and weaned pigs and consist of persistent diarrhea. The incubation period is about 36 hours from time of inoculation (exposure) to clinical signs. Clinical signs can occur within 4-5 days if introduced to a naïve barn. The virus sheds for 7-9 days. This disease is very similar to TGE as well as others that it requires laboratory testing to diagnose it with confidence. Autopsy samples are better than fecal samples or swabs.

The best way to prevent it on your farm is stellar sanitation and biosecurity. This means facilities and vehicles that transport pigs should be washed and disinfected and dried before other pigs loaded on that vehicle. Most common transmission is through fecal-oral contact with swine. It can be brought in to farms through contaminated equipment, personnel, boots, and clothing if manure is on the clothes, trucks, etc. The best advice is to not take boots, clothing or any equipment between pig populations. We know it takes 3 weeks for gilts/sows to develop sufficient antibodies to protect their babies. Baby pigs need to get adequate amounts of colostrum for protective immunity. Survival rates will return to normal in 3-4 weeks

after this. Vaccines are not effective. Elimination of this disease is best done with help from your veterinarian.

-Dr. Wanda Schmeltz