

Phone: 320-393-7447 Fax: 320-393-7777 Nathan L Winkelman, DVM nwink@jetup.net

> Adam D Mueller, DVM amueller@jetup.net

SSUI NEWS Swine Services Unlimited Inc. Quarterly Newsletter

Greetings!

This is a Swine Services Unlimited Inc. Quarterly Newsletter being generated to help inform our swine producers on what is occurring in the swine industry.



What's New at SSUI

Please help us Welcome Sarah Klehr to

SSUI! Sarah is the Records Account Manager here at SSUI in charge of managing our records bureau using the PigKnows and Metafarms software. She grew up along the beautiful North Shore of Duluth MN and Green Bay WI, as well as few cities in between. Her compassion for animal health and welfare was instilled at an early age by her grandparents and parents, who taught her about the land they farmed, the crops they grew, and the importance of education in the agriculture field.

One of her first jobs was as a dairy technician and herd manager at a large dairy operation in Foley, MN. She then pursued a degree in Associate Applied Science in Veterinary Technology and graduated in 2007 from Minnesota School of Business. In 2014, she also pursued a Professional Animal Scientist (PAS) degree, specializing in Dairy cattle.

Sarah currently lives in St. Joseph, MN with her son Benjamin. He will be graduating from high school this month and has chosen to pursue a career as a 19 Delta Calvary Scout for the Army National Guard. She will also be getting married this summer and moving to Little Falls with her fiancé, Jeff, who raises Charolaise beef cattle.

Sarah is very pleased to be a part of the team here at SSUI and looks forward to working with each and every one of you.

Swine Health - PEDV UPDATE – Last updated on 05/01/2015

Number of New Cases Reported -- Weekly aggregate update of new cases are found at <u>www.aasv.org</u> from the USDA Veterinary Services Swine Health Team. The accession information reports the number of positive cases tested at the veterinary diagnostic labs that week. The premises data, however, reports the number of positive and presumptive positive cases entered into the USDA's Emergency Management Response Services (EMRS) database.



The bar graph above shows that last winter and this spring the U.S. Swine Industry escaped the disastrous PEDV epidemic we went through one year ago. However, the graph also shows that PEDV is still being diagnosed on an almost weekly basis and it is still actively present in 34 states. Here are a few interesting PEDV facts to ponder:

- Approximately 50% of the U.S. sows have seen PEDV virus at least once. Many of these herds are still positive with endemic PEDV.
- Sow Herd Immunity is thought to last for up to 7 months following initial exposure. Therefore, it is likely more herds will be susceptible to "re-breaks" in the winter of 2015-2016.
- Three naturally occurring U.S. PEDV strains have been identified. The strains are not "cross protective", meaning that infection with one strain will not provide protective immunity against another strain.
- The two PEDV vaccines currently available are thought to provide very little immunity in naïve sow herds. However, these PEDV vaccines will

boost "gut" immunity in sows previously exposed to the live virus.

- PEDV virus is actively shed for 7-14 days following oral exposure and may shed for as long as 35 days. (Hesse IPVS Proc. 2014)
- 6) Active PEDV can live in manure pits for up to 4-6 months following an outbreak. After 6 months it is still present (via PCR analysis) in the pits but is no longer infectious.
- 7) <u>Prevention</u> <u>Do everything you can</u> to avoid getting this disease! Anything that comes into contact with contaminated feces can spread the virus. Transport and slaughter trailers are still high biosecurity risks!

Swine Production



Market volatility has shown over the past 12 months a wide range of open market carcass prices from as high as a \$1.30 to as low as \$0.55. The big question is what's next? Currently China is on a decline in sow numbers by 7.5 million sows over the past 12 As of March 1st, 2015 this has months. brought the overall global number of market hogs down by 40 million from this time last year (Pork Commentary, Jim Long, 5-2015). Other factors to consider are a good spring for planting keeping inputs down and avian influenza leading to the decline in overall poultry population in the US. Think POSITIVE as we come into the summer months for good market prices!

<u>Disease Epidemic</u> <u>Crisis in Minnesota – Avian</u> <u>Influenza!</u>

The rapid spread of a highly pathogenic H₅N₂ strain of Highly Pathogenic Avian Influenza (HPAI, AI, or "Bird Flu") which started in a turkey flock in central Minnesota in early March continues to be out of control. Since December 2014, the USDA has confirmed 147 positive HPAI cases affecting over 35 million birds. As of May 18, 2015 there are 85 turkey & chicken flocks affected in 21 MN counties with over 7.8 million birds that have died or been euthanized. MN is the largest turkey producer in the U.S.



The <u>initial source</u> of the infection is likely from subclinical wild birds or waterfowl carriers in the Mississippi Flyway. However, over 2,800 waterfowl samples have all tested negative so far. A similar but less severe H_5N_2 AI outbreak occurred earlier this year in the Pacific Flyway.

Subsequent transmission probably is occurring via both fomites (fecal contaminated boots, equipment, etc.) and aerosol spread between flocks. However, there is no definitive proof of the method of transmission. <u>**Clinical Signs</u>** include depression, fever, "cough", and rapid death within days. All affected flocks are euthanized and then composted. Losses associated with AI are financially and emotionally devastating to the industry, owners, contract growers and staff. All poultry flocks within a <u>**Control**</u> <u>**Zones**</u> in a 10 km (6 miles) radius of all infected flocks are tested weekly for HPAI and monitored closely for clinical signs.</u>

Food Safety is not a concern because the virus does not affect (or infect) the meat. Also all infected flocks are humanely euthanized and do not enter the food chain. There is no public health risk with HPAI.

What, if any, are the risks of Avian Influenza to the Swine Industry?

- Transmission of AI to pigs is possible, but unlikely since this H₅N₂ strain has never occurred in pigs. However, pigs are considered the influenza "mixing vessel" because they can and have received other influenza virus strains from both birds and humans. The CDC also considers bird to human transmission to be low. No human cases of H₅N₂ virus have ever been detected.
- 2) <u>Meat Prices</u> Turkey meat may be in short supply for 1 to 2 years because both breeder and commercial flocks are affected and the outbreak has not yet stabilized. There is at least a 3 month "downtime" following an outbreak and another 4-6 months for new birds to mature. All US export markets were "cut-off" back in March. How this may affect the price of pork, if at all, remains to be seen.

<u>**Rapid Response**</u> – There are at least 83 state of MN employees and 101 USDA employees responding to every aspect of the "Bird Flu" outbreak. Hopefully, the disease transmission will be mitigated soon.

New Health Products Available



As new challenges arise, SSUI works towards providing producers with the most innovative and cost effective products available to the swine industry.

Balance^R (Stress and Dehydration Aid) – Balance^R (Aurora Pharmaceuticals) is a nutritional/metabolic supplement formulated systemic to balance electrolytes needed to maintain hydration. It acts as a buffering agent to correct the blood pH when stress challenges occur due to environmental heat or handling. Balance has been shown to increase water consumption, reduce body temperature and lower blood pH reducing oxidative stress. Please talk with Drs. Winkelman or Mueller for more details.



Thanks to all our producers. We at SSUI wish you all a Safe and Happy Memorial Day Weekend!