IOWA STATE UNIVERSITY
Extension and Outreach

Southeast Iowa Snouts and Tails

November 2018 Newsletter

Greetings Swine Producers,

Southeast Iowa Snouts and Tails Newsletter is created periodically to make you aware of issues pertinent to the swine industry as well as sharing upcoming programs which may be of value to your operation. Please share any thoughts and ideas/interests you have and we will try and incorporate them.

Tom Miller
ISUEO Swine Field Specialist

African Swine Fever Virus

African swine fever virus (ASF) is a serious, highly contagious, viral disease. Recently, several cases of ASF have been confirmed in numerous Chinese provinces. U.S. swine industry organizations are working continuously on prevention and

UPCOMING EVENTS

Dec 4th Washington and Surrounding Counties Beginning Farmer meeting
Washington Extension office
5:30-8:30 PM rsvp
nadrian@iastate.edu or call 319-653-4811 by noon of the 4th

response to help keep ASF out of U.S. pig farms. ASF cannot be transmitted to humans, so it is not a public health or food safety concern. However, it can spread rapidly in pig populations by direct or indirect contact, and there is currently no vaccine or treatment. That's why it is essential for the U.S. swine industry to be well informed and well prepared should an ASF outbreak ever reach the United States. This page provides a wealth of ASF resources.

African Swine Fever Virus youtube Video

Dr. Chris Rademacher has produced a short but inclusive video about Africa Swine Fever.

African Swine Fever Youtube video

Dec. 5th Lee County Transitioning to Farm group meeting
Lee Co. Extension office Donnellson 5:30-8:30 PM rsvp weising@iastate.edu or call 319-835-5116

Dec 5th 12:30 PM - 4:00 PM Pro Ag Outlook Iowa City/Johnson County

Dec 6th 7:30 AM - 11:00 AM 2018 Pro-Ag Meeting - Management Options for Lenders and Agri-businesses Mt. Pleasant/Henry County

Dec 11th Swine Biosecurity Workshop
Washington County Extension office 1:00-4:00 PM rsvp tmiller@iastate.edu or 319-653-4811

Dec 12th Individual Pig Care

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Individual Pig Care Training Program

With support from the National Pork Board, more pork producers and pig caregivers across the United States will have access to the Individual Pig Care program. Trained veterinarians, extension agents and PQA Plus trainers will deliver the same Individual Pig Care training that has been conducted and owned by Zoetis.

Those who participate will learn how to properly monitor pig health on an individual basis. This helps ensure any sick pigs are identified early, so they may be treated appropriately, as directed by the herd's veterinarian, and in a timely manner. Pigs exhibiting signs of

Clinic

Washington County Extension office 1:00-4:00 PM rsvp tmiller@iastate.edu or 319-653-4811

WEB RESOURCES

Iowa State University Extension and Outreach

Iowa Pork Industry Center (IPIC)

Iowa Manure Management Action Group (IMMAG)

ISUEO Ag Decision Maker

Iowa Pork Producers Association (IPPA)

ISU Livestock Crush margin app

ISU Livestock Crush Margins

illness are rated by using a classification system:

• A pig = Acute illness
• B pig = Subacute illness
• C pig = Chronic illness
• E pig = Humanely euthanize

The classification system allows caregivers to communicate a pig's health condition more clearly to their managers and herd veterinarians. By doing so, pigs needing treatment are provided care at the right time with the right product and according to veterinarian-directed protocols. This essentially is the cornerstone of responsible antibiotic use.

"Pork producers are proud of how they care for their pigs," said Bill Winkelman, vice president-producer and industry relations, National Pork Board. "We're continuously collaborating with others to improve animal husbandry and focus on a bright future for pork. By bringing the Individual Pig Care program to

The Manure Scoop (blog page by Dan Anderson ISUEO)

National Pork Board

HOT TOPICS

2018 Iowa State Animal Industry Report

VFD Information and Resources

Revised IPIC Webpage

Producers alerted to dangers of hydrogen sulfide

Iowa Nutrient Reduction Strategy

more producers, we can have an industrywide, consistent method of care that results in healthier pigs."

To learn more about the Individual Pig Care in-barn education and training program, please contact tmiller@iastate.edu or 319-653-4811

Dec 12th Individual Pig Care Clinic

Washington County Extension office 1:00-4:00 PM rsvp tmiller@iastate.edu or 319-653-4811

Biosecurity Workshop Series

Program Description

A series of biosecurity workshops offers pork producers a mechanism to develop a progressively deeper understanding of critical steps in biosecurity and health management. The program uses lectures and activities to demonstrate

and identify possible risk events and carrying agents that can compromise a farm's biosecurity protocols. Herd health is a number one driver of performance and profitability. The workshops enable pork producers to learn from case-studies and prioritize the highest ranking risk events for their own operation. It is timely to review biosecurity as the global spread of African Swine Fever

continues, we hope it can be kept out of the US, but if not biosecurity becomes that much more important.

In addition to review of biosecurity protocols, a new way to think about it and possibilities to greatly reduce risk are going to be discussed. One hypothetical example takes a farm breaking with PRRS every other year through employee entry to a risk reduction strategy that changes the risk of employee entry to one break in over a hundred years.

The focus at each session will include: diseases of concern, pathogen transmission, risk events, prioritizing farm risks, cost of disease, carrying agents, intervention strategies, best practices, implementing biosecurity culture, and case studies. With the highest ranked risk event generally being employee entry, much of this initial workshop will focus on that. The effectiveness of traffic patterns, bench entries and other measures will be focused on.

The program is delivered by a team of extension professionals including:•

Swine Field Specialists: Russ Euken, Colin Johnson, Tom Miller, Dave Stender and Mark Storlie in collaboration with Dr. Derald Holtkamp, DVM ISU VDPAM.

Dec 11th Swine Biosecurity Workshop

Washington County Extension office 1:00-4:00 PM rsvp tmiller@iastate.edu or 319-653-4811

Are Those Around You Showing Signs of Stress?

Stress can build from multiple sources - be it financial, health, production, market and Ag policy uncertainty, family dynamics, etc. This has been a stressful year for several farmers in all commodity segments. This is a brief reminder to keep an eye on neighbor or clients if you observe changes that may be due to stress.

The Iowa Concern Hotline is a 24-hour a day, 7-day a week free, confidential resource for anyone with concerns or questions about farm finances, crisis and disaster response and personal health issues. Access to an attorney is also available to help provide legal education.

“If someone calls who is dealing with stress and its effects, the first thing we do is to work with the person on that issue and provide immediate stress counseling,” said Tammy Jacobs, Iowa Concern Hotline coordinator. “We try to provide access to the assistance each individual needs.”

Iowa Concern Hotline staffers work to provide contact information for ISU Extension and Outreach specialists who can help address specific questions or direct callers to other partners near where they live to help navigate through their current situation.

Please share this resource with someone that is stressed to provide resources and options. Anyone can call.

Research updates:

Recently published research – November 9, 2018
Summaries by Kristin Olsen, Iowa Pork Industry Center

Gustavo S. Silva, Luis G. Corbellini, Daniel L.C. Linhares, Kimberlee L. Baker, Derald J. Holtkamp, **Development and validation of a scoring system to assess the relative vulnerability of swine breeding herds to the introduction of PRRS virus,** Preventive Veterinary Medicine, Volume 160, 2018, Pages 116-122, https://doi.org/10.1016/j.prevetmed.2018.10.004
Biosecurity is essential to prevent disease infection and spread in the swine industry. However, it is a fairly difficult thing to measure and quantify. Recent research led by Gustavo Silva in the Department of Veterinary Diagnostic and Production Animal Medicine at Iowa State works to measure and compare vulnerability related to PRRSv outbreaks on swine farms. Breeding farms were given biosecurity vulnerability scores based on their biosecurity practices associated with risk events known to be

related to PRRSv introduction on a farm. For example, swine movements, pickups/deliveries, people movement, pork/food product entry, manure handling, domestic or wild animal and insect exposure, air and water movement. There was a positive correlation between this biosecurity vulnerability score and number of PRRSv outbreaks; in other words, farms that had higher vulnerability scores (were more vulnerable) had more PRRSv outbreaks. The results suggested that events related to swine movements, transmission by air and water, and movement of people were the most influential on a farm's biosecurity vulnerability score, and should be prioritized as areas to improve biosecurity practices and reduce the risk of PRRSv infection and spread. Dr. Silva also expanded on these concepts in his presentation at the ISU McKean Swine Disease Conference on November 1. His data demonstrated that a predictive value based on just 6 factors (frequency of weans, number of finishing sites within 3 miles, frequency of rendering, dead disposal method, sharing of trailers between cull animals and PRRSv positive animals, and whether the farm was a commercial herd) was highly correlated with frequency of past PRRSv outbreaks, and was able to identify farms that had outbreaks in the past 5 years with 80% accuracy. These tools can help benchmark biosecurity practices and identify farms with relatively high or low risk of PRRSv introduction.

Jordan T Gebhardt, Roger A Cochrane, Jason C Woodworth, Cassandra K Jones, Megan C Niederwerder, Mary B Muckey, Charles R Stark, Mike D Tokach, Joel M DeRouchey, Robert D Goodband, Jianfa Bai, Philip C Gauger, Qi Chen, Jianqiang Zhang, Rodger G Main, Steve S Dritz; **Evaluation of the effects of flushing feed manufacturing equipment with chemically treated rice hulls on porcine epidemic diarrhea virus cross-contamination during feed manufacturing**, *Journal of Animal Science*, Volume 96, Issue 10, 29 September 2018, Pages 4149–4158, https://doi.org/10.1093/jas/sky295

Feed mill biosecurity is also important to keep in mind for reducing risk of disease transmission. A recently published study from researchers at Kansas State and ISU investigated potential strategies for reducing PEDV contamination during the feed manufacturing process. Rice hulls treated with medium chain fatty acids (MCFA) or formaldehyde were tested as a flush step after mixing PEDV contaminated feed. Treating rice hulls with MCFA and formaldehyde reduced the amount of PEDV genetic material that was detectable in the rice hulls after the flush. In general, flushing appeared to be an effective strategy because none of the samples of feed mixed after flushing with either untreated or treated rice hulls tested positive for PEDV. Dust samples from areas above feed contact regions of the mixer were also collected after each batch mixed; dust samples taken after the PEDV positive feed was mixed had detectible levels of PEDV genetic material, and this dust was able to cause infection in PEDV naive

pigs. The results of this study demonstrate that flushing with treated rice hulls may be an effective strategy for reducing viral contaminations within a feed mill, in the event that biosecurity measures in place to prevent a feed mill from becoming contaminated fail. It is especially notable that dust is able to serve as a vector for PEDV transmission, and should be an area of further investigation regarding feed mill biosecurity practices.

More Manure helps

Hydrogen Sulfide safety series:

- Hydrogen Sulfide Safety - Monitoring
- Hydrogen Sulfide Safety - Manure Agitation
- Hydrogen Sulfide Safety - Swine Barn Ventilation

eMMP online manure management plan application site:
http://www.iowadnr.gov/Environmental-Protection/Land-Quality/Animal-Feeding-Operations/Electronic-MMP-Project?utm_medium=email&utm_source=govdelivery

ISUEO Manure value calculator:
https://www.extension.iastate.edu/agdm/livestock/html/b1-65.html
Sample manure ahead of pumping to utilize all nutrients and not over/under apply:
https://store.extension.iastate.edu/Product/pm1558
How to interpret your manure analysis:
https://store.extension.iastate.edu/Product/pm3014
Using manure nutrients for crop production:
https://store.extension.iastate.edu/Product/pmr1003
Not sure when your manure plan due date is? Go here to learn how to determine due date.
https://store.extension.iastate.edu/Product/pm3020

Application Timing - Soil temperatures. As a general rule, do not apply manure in the fall unless the soil temperature is 50° F and cooling at the four-inch soil depth. This will slow the mineralization and nitrification processes and is an especially important consideration for manure containing a large portion of N as

ammonium.

The fraction of total N as ammonium N was almost 100 percent for swine manure from the liquid portion of anaerobic lagoons and 65 to 100 percent (average 84 percent) for liquid swine manure from under-building pits or storage tanks. The large ammonium-N concentration and organic-N fraction that is easily mineralized after application to soil explain why N in liquid swine manure is considered “highly” crop available and almost comparable to fertilizer N.

Application Timing - Forecast. Avoid manure application before a rain event.

Iowa Pork Industry Center Launches Revised Website

Check it out at: https://www.ipic.iastate.edu/

Online option available to renew TQA or PQA Plus® Certification

New or Renewal TQA or PQA Plus Certification can be completed through face-to-face or online training. To be eligible to re-certify through an online course/exam:

- Contact a certified advisor before current certification expires
- Provide the advisor (tmiller@iastate.edu) with an email address for the purpose of sending online training instructions
- Complete online training within 30 days of receiving access to train.

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