



Four Star Veterinary Service LLC

Fall 2015 Newsletter

Reproduction Tips

I challenge you to think through the daily routines on a sow farm. Sometimes these activities are so ingrained that we never stop to think about it. If semen is not delivered as expected, what kind of panic does it cause? What effect does this have on the sow farm production? As an owner, manager, and/or employee it is so important to take the time to reflect on what is going on and how to better improve productivity. In this article, I want to highlight some areas to focus on, which will hopefully keep conception and farrowing rates up and non-productive days low.

Where do we start? There are so many important factors and we will not be able to cover them all in this newsletter. First evaluate the records and your herd. What is your average parity and what does your parity structure look like? Cull rates, gilt entries, and sow deaths all play into this. Not to mention the unforeseen event of a disease entry and subsequent clean up management/plan.

Many times it is taken for granted how gilts are handled in sow units. I hope this is not the case for you and that you have a gilt entry plan written up that includes, acclimation to pathogens that are present on the farm, vaccination protocol, solid heat-no-service program, and have done your homework on genetics. Gilts are the future of the herd and if they are not handled correctly it can cause significant loss. When farms do a poor job of retaining young parity females, a higher number of gilts must be brought in to replace losses. This causes the herd's average parity to decrease, which can lead to issues like, lower birth weights and lower colostrum protection in P1 litters. Gilt litters generally have lower birth weights; leading to higher pre-weaning mortality and lower weaning weights. Typically, gilt litters will have a higher incidence of scours.

Furthermore, if a herd's average age is low, there is an additional cost of replacement gilts. A female typically does not pay for herself until her second or third litter is weaned depending on gilt costs, feed costs, productivity and piglet purchase price. Female retention should look something like the following:

Age	Retention
First breeding	100
1 st Farrowing	>92
2 nd Farrowing	>85
3 rd Farrowing	>75

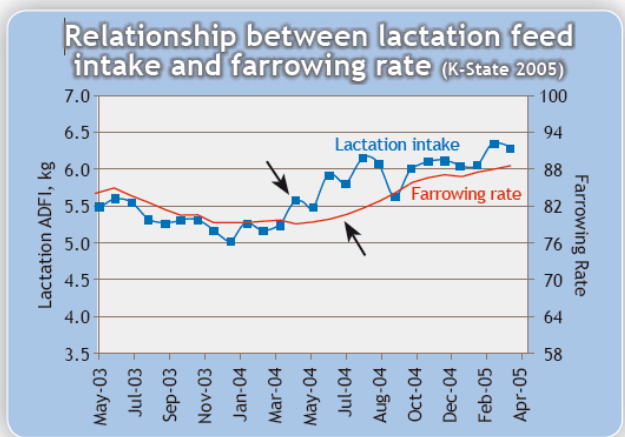
Parity Effect						
Parity	P1	P2	P3	P4	P5	P6
Piglet Survivability	84.8%	86.7%	85.9%	84.4%	83.9%	82.8%
WW at 21 days	15.2lbs	15.9lbs	16.3lbs	16.3lbs	16.5lbs	16.5lbs
W-Mkt Survivability	91.5%	93.4%				

Charts courtesy of PIC Gilt and Sow Management Manual

Now that we have the gilts on the farm and our parity structure is where we would like, let's look at the number one cost on a farm...feed. How does feed intake affect overall production? As veterinarians, we always look carefully at body condition during herd visits. So what are we trying to put together in our minds? In this newsletter, I will focus on lactation intake and its overall effect. First thing to remember is that reproduction is a biological luxury and will only be optimized when maintenance nutritional requirements are met. A highly productive sow is largely the result of the first lactation management, in terms of feed intake and

number/quality of the piglets nursed. Challenge the P1 female with 13-14 strong piglets to properly develop and stimulate all mammary glands. Make sure that the sow has that many functional teats available to the piglets. In general, systems that have a higher lactation intake tend to be more productive than systems with lower lactation feed intake. In other words, feed = milk. Make sure water flow rate is no less than ½ gal/min. Sows should drink > 5 gal/day. Have farrowing room employees monitor gilts as they may not be used to where the waterer is and will need to be shown a couple times a day.

Sows should be getting up at least once daily during feeding and monitored for any signs of illness. Lower or depressed feed intake can be one of the first signs of an issue. Sows that are not eating properly should have their temperature taken to check for infectious disease, their environment should be investigated: is it too warm, water is available, feed is palatable, feeder is clean, etc.



There are many areas on the farm that can impact reproduction performance and I was only able to highlight a few here. Please take some time to evaluate how your conception and farrowing rates are and what may be causing this. Always remember that you are part of a team on the farm and have a large impact on that farms' success. How can you help improve it?

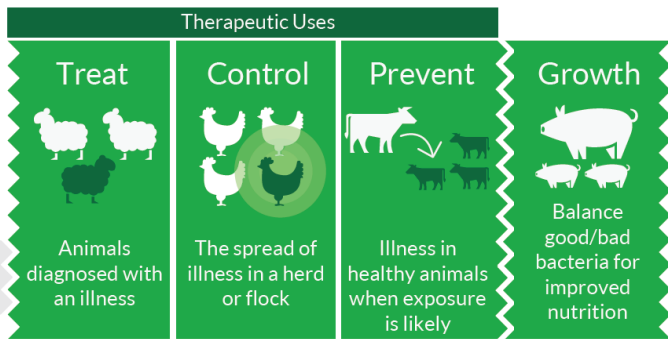
FDA Guidance #209/#213

What is going to happen with food animal antibiotic usage in the next couple years and how do we prepare for a smooth transition? Many of you are aware of the Veterinary Feed Directive (VFD) Guidance #209/#213; however what do they mean for the industry?

FDA's goal is to protect human health and curb development of antimicrobial resistance. The industry will retain access to our current feed grade/water grade antibiotics; but, these guidelines will change the way they are used. VFDs are issued only under the supervision of a licensed veterinarian. Therefore, producers will be required to have a valid veterinarian-client-patient-relationship (VCPR) if they want to use feed medication. Many of you already have this relationship with your Four Star veterinarian as your current PQA plus certification requires it. Record keeping will be critical for this, as well as the common audits that will be talked about in the next section. A VFD will only be valid for 6 months, so knowing your renewal dates will be important. Veterinarians, feed suppliers, and producers must keep a copy of each VFD for 2 years.

Guidance #209 and #213 recommend that drug sponsors remove any growth promotional labeling from their products. Medications will only be used for treatment, control, and prevention of a pathogen. "The Judicious Use of Medically Important Antimicrobial Drugs in Food Producing Animals" will eliminate the feed and water use of medically important antimicrobial drugs for production purposes in food-producing animals and bring all remaining therapeutic uses under the oversight of a licensed veterinarian. Medically important antimicrobials are everything we use in food animals except for ionophores, bacitracin, bambermycins,

and the pleuromutilins (tiamulin). In all, there will be 283 products added to the VFD list.



So the bottom line is that the use of antibiotics for any purpose in feed or water will require veterinarian authorization in the form of a VFD (for feed) or a veterinary prescription (for water). Work with your Four Star veterinarian on how to better prepare for this at your farm. Implementation will be January 1, 2017.

Common Swine Industry Audit



Over the past few years, many packers have initiated a Third Party auditing requirement for your farms marketing swine to them. These programs are intended to assure consumers that the animals that produce their pork are well cared for throughout their lives. To prevent complications to farms of having to comply with multiple auditing programs, the National Pork Board (NPB) announced an effort to work with packers to create a common swine audit in June 2014. The NPB wanted a credible, affordable solution to assure on-farm animal well-being. The common audit can be found on the NPB website. The purpose of this is to be proactive and help verify that the pork industry's approved animal well-being

standards are followed. This will be a point-in-time snapshot of your farm by an independent party and there is no educational component to it. There will be 4 focal areas; including records, animals, facilities, and caretakers. It is based on a points scale for pass and fail. There are a few critical failure points around animal welfare, which means if the auditor sees any willfull acts of abuse or improper euthanasia, your farm will fail the audit. Please take a look at the requirements. Four Star has partnered with Kari Steele to work with you and your farms to prepare prior to these audits. She will go through all of the paperwork with you and your employees, looking for areas of improvement to help insure that your farm will pass these audits. Please contact your Four Star veterinary office to set up an appointment with Kari.

Viral Corner

What is happening in the area today in regards to viral threats to our industry? Those major viruses being PRRSv, Swine Influenza Type A virus (IAV-S) and Swine Coronavirus (PEDv, Delta).

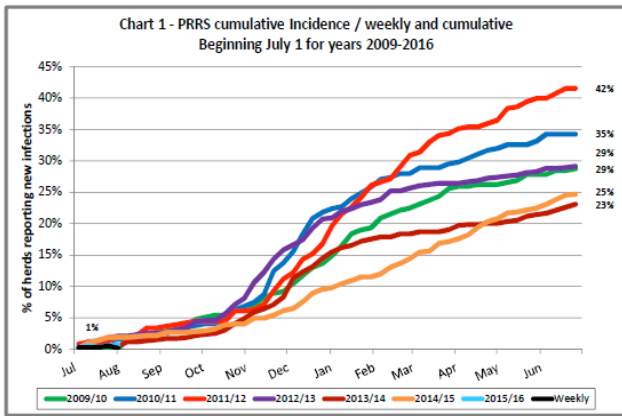
PRRSv: If you have been hit with PRRSv this year, it has been a struggle cleaning up. Most people were hit with a strain 1-7-4. This struck many farms causing sow mortality, abortion storms, and reproductive failure. The industry has been moving toward testing of piglets at a younger age to determine time to stability at birth. Upon knowing this, some wean down techniques have been implemented to try and clean the virus up in a more timely manner. We have seen that the sow unit environment has played an important role in clean up time. Important areas to monitor are farrowing room hygiene, castration/tail docking equipment management, how often needles are changed, and how piglet mortalities are disposed of, to name a few. The next page provides a graph showing the trend of PRRS.

Dr. Dale Hendrickson (IN)
Dr. Daniel Hendrickson (IN)
Dr. Daren Miller (IN)

Dr. Bill Minton (OH)
Dr. Terri Specht (OH)
Dr. Bethany Heitkamp (OH)

Dr. James Kober (MI)
Dr. Duane Long (IN)
Dr. Doug Powers (IN)

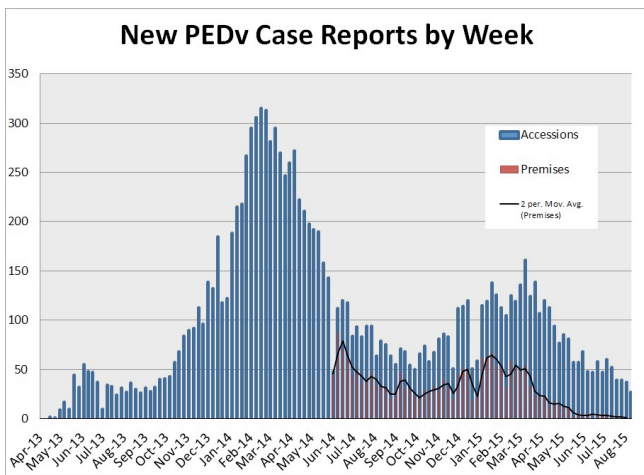
Dr. Michael Pierdon (PA)
Dr. Jon Van Blarcom (PA)



Graph courtesy of Swine Health Monitoring Project, UMN

IAV-S (Influenza Type A virus – Swine): Flu has not gone away and during this time of year, it likes to spread. IAV-S causes high fevers, mortality in grow-to-finish pigs and on sow farms can cause high fevers, sows to be off feed, and low conception rates. Vaccinations are available and commonly used to limit the risk of outbreaks. For sow units that are vaccinating, fall is an ideal time to get this done. Please talk with your Four Star veterinarian on vaccination programs that best fit your operation.

Swine Coronaviruses: What is going to happen this winter with PEDv and SDCv? No one knows the answer, but we all hope it is similar to last winter and not the winter of 2013-2014.



Graph courtesy of AASV.org website

Some of these cooler nights lead you to believe that fall and therefore winter is on its way. The above mentioned viruses do tend to increase in winter time due to increased survivability in cold temperatures. It has been shown that PRRS season begins to reach epidemic threshold in October/November and spikes in January/February. PEDv shows a similar trend. Please consider reviewing your whole-herd vaccination strategies for these viruses. As we head in to winter, it is also important to review biosecurity protocols. Remember that during cold months it is more difficult to properly disinfect trucks and trailers due to freezing temperatures, but there are products such as antifreeze that can be used to help lower the freezing point on these disinfectants. Please remind all employees of biosecurity practices this fall and as always, their importance.

Happy Harvest!

To our clients and their families:

Summer seemed very short this year, with fall appearing to arrive early. I hope this finds you doing well and that harvest is starting off good despite the large amount of rainfall. We truly appreciate your continued support and look forward to helping you in the future.

Happy fall!



Dr. Dale Hendrickson (IN)
 Dr. Daniel Hendrickson (IN)
 Dr. Daren Miller (IN)

Dr. Bill Minton (OH)
 Dr. Terri Specht (OH)
 Dr. Bethany Heitkamp (OH)

Dr. James Kober (MI)
 Dr. Duane Long (IN)
 Dr. Doug Powers (IN)

Dr. Michael Pierdon (PA)
 Dr. Jon Van Blarcom (PA)