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Inducing Sows to Farrow a Practical Approach

- Rob English
- (314) 560-7163
- robt.english@gmail.com
- SowBridge
- November 5, 2014
Overview of Inducing Sows to Farrow a Practical Approach

Presentation Overview

1. Benefits and purpose of induction
2. Induction basics
3. Monitoring an induction program
4. Pros and Cons
5. Summary
Benefits and purpose of induction

- Reduce total hours of active farrowing batches
  - Greatest impact to improving % weaned of total born
  - Potential to increase your % litters attended
  - Scheduling labor
  - Day 1 Care
  - Attend to challenged pigs
Benefits and purpose of induction

- Reduced gestation length variation (111-119d)
  - cross-fostering
    - within 24 hr of birth
    - survival and uniformity
  - all-in/all-out
    - Health of downstream flow
  - Predictable farrowing house flow
  - avoid weekends/holidays
Benefits and purpose of induction

- Induce Farrowing to Reduce Variation (111-119d)
  - Gestation length
  - Time of day
  - Works well in concert with Single Fixed Time Insemination (SFTAI)
    - Ovugel
  - all-in/all-out
    - health advantages
  - Wean age
  - Avoid weekends/holidays
Benefits and purpose of induction

Out-Warm/Dry-Safe-Colostrum& Milk to Wean

- Assisting sows to reduce stillborns
- Removing placenta and reviving piglets
- Warm and dry piglets to prevent chilling
- Colostrum intake verification and assistance for at risk piglets
- fostering
- Saving laid ons
- Preventing savaging
Induction Basics
Safety

Safety Notes from label insert of Lutalyse™

- **Warnings:** Not for Human use, Pregnant women, asthmatics, or persons with bronchial and other respiratory problems should avoid contact with dinoprost tromethamine

- **Note:** spills of Lutalyse™ on the skin should immediately be washed off with soap and water.
Induction Basics

Gestation length

- Know your herd’s average gestation length
- Typical commercial crossbred genetics averages 115.5 days
- Verify accuracy of the date of first service
- Threat-perfectly accurate breed target syndrome
Induction Basics

Hormone Function

- Regression of corpora lutea (CL) on ovary
  - prostaglandin-F2α
    - Lutalyse™, Prostamate™, (Estrumate™)
- Induction of uterine contractions
  - oxytocin
Induction Basics

What actually happens

- Processes occurring at farrowing
  - Lower progesterone in the sows bloodstream
  - Cervix dilates
  - Uterus contracts
  - Milk letdown
Induction Basics

Standard Work

1. Prepare farrowing house for success with all supplies and equipment prior to induction by following a room set up checklist.

2. Locate sows to be induced for targeted date to farrow
   1. i.e.-6 AM find sows on 114 days post mating

3. Check 114 day sows for signs of milk
   1. If sow has good milk when teats are squeezed do not induce

4. Inject 114 day sows without milk with 2cc Lutalyse™ intramuscularly. Document time and date
Induction Basics

Standard Work Continued

5. Check sows given Lutalyse™ on day 115 for signs of farrowing onset
   1. Prefarrow discharge, presence of milk, pushing

6. Stimulate the pre farrow sows with streaming milk to farrow on shift by:
   1. Underline rubbing
   2. Short sleeve
   3. Oxytocin injection

7. Once sow begins to farrow continue your normal Day 1 Care protocols
The Fishing Analogy

Fisherman’s checklist
- Rod
- Line
- Hook
- Bait
- Lake (with fish in it!)
- Boat
- Knowledge and experience in successful fishing

What is missing?
- This checklist does not show how much time the fisherman actually fishes.
- Induction may be your missing item in your farrowing checklist
Monitoring the Program

- Develop performance metric goals prior to starting or improving your induction and attendance program
  - % attended on shift
    - Definition-observe first and last pig born
    - Attended sows/all sows farrowed in period
  - % Stillborns
    - Period % stillborns
    - Number of stillborn piglets/Total piglets born
      - Total Born=Born Alive, Stillborn, Mummies
  - Day 0-3 Preweaning Mortality %
    - All piglets born alive that died on day 0,1,2,3
    - Piglets died in period/piglets born alive in period
Monitoring the Program

- Develop a method to track your farrowing attendance and subsequent Farrowing performance metrics

<table>
<thead>
<tr>
<th>Farrowing Induction Scorecard</th>
<th>Week</th>
<th>47</th>
<th>48</th>
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<td>% Attended</td>
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<tr>
<td>Stillborn %</td>
<td>Goal</td>
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<td>Variance</td>
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<tr>
<td>Day 0-3 PWM %</td>
<td>Goal</td>
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<td>5%</td>
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<td>Variance</td>
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## Monitoring the Program

### Scorecard example

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<td><strong>% Attended</strong></td>
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<td>1%</td>
<td>3%</td>
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<tr>
<td><strong>Stillborn %</strong></td>
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<td>0.0%</td>
<td>0.1%</td>
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<tr>
<td><strong>Day 0-3 PWM %</strong></td>
<td>Goal</td>
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<td>5%</td>
<td>5%</td>
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Pros and Cons

- **Pros**
  - Attend more farrowings over a shorter timeframe
  - Apply your best caretakers to farrowing sows more predictably
  - Catch more fish!

- **Cons**
  - May not provide results when breeding dates are uncertain
  - Has some safety considerations for caretakers
  - Requires a change of thought process to care for sows and pigs
  - Adds complexity to farm routines
Summary

- Know non-induced gestation length
  - Plan no more than 2 days early
- Design and implement your induction standard work
- Monitor performance with metrics
  - % attended, Stillbirth %, Pre Wean mortality, Pigs Weaned
- Educate and monitor safety of Caretakers with respect to prostaglandin use