Building Consumer Confidence through Judicious Use of Antimicrobials

Prepared for 2018 Antibiotic Symposium
Introduction

Dr. Mary Battrell
• Staff veterinarian for a division of Smithfield Foods for 21 years.

What are our primary responsibilities?
• To care for the health and well being of the animals in our care.
• To provide a safe and wholesome product to our customers.

These two responsibilities are not in conflict
• It would be unethical to not provide treatment for a sick animal.
• We understood decades ago that in order to build consumer confidence and keep antibiotics available we would have to use them responsibly.
Antibiotic Use

• Any products that go in, on, or near a Smithfield hog must first be approved by a licensed veterinarian (and our safety department).
  • All products used on our animals must:
    • Come through our supply warehouse.
    • Have written prescription from a licensed veterinarian.
    • Be assigned to and used on a specific lot of animals.
    • Be administered as instructed by a veterinarian.
    • Be documented when administered.
Prescription

• Prescription required to move products from our buying co-op to our warehouse since 1996.

• Computerized system today:
  • Farm must has a prescription to get the product out of our warehouse.
  • Each item is charged to a specific lot number (barn within the farm).
  • All items charged to a lot are traceable.
  • If a partial bottle of injectable is left after a lot closes, it can be used in the next barn. Use is documented on the door chart when administered to pigs.
The Farm(s) described under the Veterinary supervision have permission to use the following products for the conditions indicated at the recommended dosages. Dosages and withdrawal periods are to be strictly adhered to. List of Farms on the last page.

Number: 2825

Prescription Date: 06/28/2018

Veterinarian: Mary Battrell
785 NC Hwy 24 & 50 W
Warsaw NC 28398
910-271-0474

Product: Alivlosin
Active Ing: Typhllosin
Conditions: Treatment – diarrhea and porcine proliferative enteropathy due to Lawsonia intracellularis
Dosing: One 160 gram pack treats 44,000 lbs. live wt. (4 gallons stock solution). One 400 gram pack treats 110,000 lbs. live wt. (10 gallons stock solution). Pour into cold stock solution at an angle stirring continuously for 3 minutes. Do not pour all at once.
Dose: 1 oz. per 1 gallon at 50 ppm
Treatment: Medicate for 5 consecutive days
Withdrawal: 3 days
Quantity: PRN Pack
Medication Treatment Chart

- Produced by the Smithfield veterinarians
- Reviewed at least quarterly
- List all anthelmintics, oral and injectable antibiotics, topicals, insecticides, anti-inflammatory, reproductive, water line cleaners, flavoring agents, electrolytes, nutritional supplements and vitamin supplements
- Product name
- Dosage
- Mixing directions
- Key points and indications
- Withdrawal times
Medications

• All medications in the MTC are used strictly according to the veterinarians instructions.
• Withdrawal periods are often extended to reflect our international business.
• Do we put ourselves at a competitive disadvantage?
  • Longer withdrawal
  • Only products with animal label
  • No human labeled products
  – Maybe but we are Smithfield and protecting our brand is extremely important.
Documentation of Use

• The care giver is responsible for documenting all water soluble, and injectable antibiotics and vaccinations when they are administered to our animals.
• Records are retained for 3 years.
• Verification:
  • Production staff
  • Veterinary visits
  • PQA+ site assessments
  • CSIA Internal and external Animal Care Auditors
  • Smithfield PVP audits
  • Employee certification program
BREEDING/GESTATION/FARROWING TREATMENT SHEET
Hoja de Tratamiento Montas/Gestación/Maternidad

Location: ____________________________  Start Date: ____________________________

<table>
<thead>
<tr>
<th>ID Identificación</th>
<th>LOCATION Localización</th>
<th>Route Ruta</th>
<th>MEDICATION Medicina</th>
<th>Dosage Dosis</th>
<th>DAY 1 DATE Fecha Día 1</th>
<th>Initial Inicialis</th>
<th>DAY 2 DATE Fecha Día 2</th>
<th>Initial Inicialis</th>
<th>DAY 3 DATE Fecha Día 3</th>
<th>Initial Inicialis</th>
<th>WITHDRAWAL DATE Fecha de Retiro</th>
<th>OUTCOME Resultado</th>
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- Abbreviations/Abreviaturas:
  - **Route/Ruta**: IM – intramuscular; O – oral; SQ – subcutaneous (Baytril/enrofloxacin only); T - topical
  - **Medication/Medicina**: B – Baytril; C – Calcium gluconate; E – Excenel; D – Draxxin; F – Flunixin; Li – Lincomycin; L – Lutalyse; N – Naxel; O – Oxytocin; OT – Oxytet; Pen – Penicillin; Poly – Polyflex; PG – PG600; PR – Predet; T – Tylan;
  - **Vaccine/Vacuna**: CV – Circovirus; EC – E coli vac; FLU – Influenza; M – Mycoplasma; PLE – Farrowsure; PRRS – PRRS
- Technician administering medications must refer to the Medication Treatment Chart to complete MEDICATION, DOSAGE and to calculate WITHDRAWAL DATE. El técnico debe buscar en el Libro de Tratamientos Médicos para completar la columna de Medicina/Dosis y calcular la Fecha de Retiro
- Retention period: **Two years**

Revised: 4/24/2014
## Piglet Treatment Record for Sow Farm
### Registro de Lechones en Granjas de reproducción

**Date Started/Fecha de inicio:** ____________________

**Farrowing Room/Cuarto de maternidad:** _______________

<table>
<thead>
<tr>
<th>Crate #</th>
<th>Route</th>
<th>Medication</th>
<th>Dose</th>
<th>Día Tratados</th>
<th>DAY 1</th>
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**Abbreviations/Abrreviaturas:**
- **Route/Ruta:** IM – intramuscular; O – oral; SQ – subcutaneous (Baytril/enrofloxacín only); T – topical
- **Medication/Medicina:** B – Baytril; D- Draxxin; E – Excenel; ED – Excede; F – Flunixin; G – Gentamicin; IP – Iron/Penicillin; Li – Lincomycin; N – Naxcel; Poly – Polyflex; PR – Predel; SP – scoursalt/spectam; T – Tylan;
- **Vaccine/Vacuna:** CV – Circovirus; Flu – Influenza; M – Mycoplasma; PRRS – PRRS;

Technician administering medications must refer to the Medication Treatment Chart to complete the blocks **MED/DOSAGE** and to calculate **WITHDRAWAL DATE**. **El técnico debe buscar en el Libro de Tratamientos Médicos para completar la columna de Medicina/Dosis y calcular la Fecha de Retiro**

**Retention Period:** Two Years

Revised 4/24/2014
# Oral Water Medication and Vaccination Usage Record

<table>
<thead>
<tr>
<th>Date</th>
<th>Medication</th>
<th>Dose per Day</th>
<th># of Days Given</th>
<th>Withdrawal Days</th>
<th>Initials</th>
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# Medication Usage Record / Spot Treatment
(Administration route as directed in Medication Treatment Chart)

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<thead>
<tr>
<th>Date</th>
<th>Medication</th>
<th>Dose per head</th>
<th># Treated</th>
<th>Withdrawal days</th>
<th>Paint Color</th>
<th>Initials</th>
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VFD

• Staff veterinarians have always worked with nutritionist to determine appropriate use of feed grade antibiotics at specific stages.
• Quarterly review has been in place for 2 decades.
• Computer system will not allow feeds with select medications to be issued to a farm without an active VFD.
Teaching and Training

Tremendous amount of our time is spent teaching and training:

• Sick pig identification to care givers on farms.
  early recognition and early intervention

• Disease identification and sample collection to our production staff:
  oral and processing fluids
  fecal and nasal swabs
  blood samples
  tissue samples

• Diagnostic lab results assist us in making informed decisions on antimicrobial selection.

• PQA+ training

• Employee Certification
Auditing/Verification

- Production staff
- Veterinary visits
- PQA+ site assessments
- CSIA Internal and external Animal Care auditors
- Smithfield PVP audits
- Employee certification program
Antibiotic Free

- We do have some antibiotic free pigs.
- High health farms in low dense areas with above average management.
- If a pig needs treatment it receives a tag in each ear and is segregated at marketing.
- Should an antibiotic free farm face a disease challenge, we move the program to another farm.
Good food Responsibly
its not just a slogan