

# Wisconsin Show Pig Assn. Symposium

Tammy Vaassen, WI Pork Association

# Who we are

## Board

- Jim Magolski, President
- Jonathan Wyttenbach, VP
- Brian Klubertanz, Sec.
- Mike Salter, Treas.
- Nathan Brickl
- Ray Ibeling
- Tom Knauer
- Bob Spurley
- Shannon Wolf
- AV Roth

## Committees

- Swine Health
- Producer Outreach
- Youth
- Promotion/Pork Schoppe



# Mentorship Program – 2018 participants

- Caitlyn Wileman
- Shelby Veum
- Elizabeth Ries



# What is PRRS??

- Porcine Reproductive and Respiratory Syndrome
  - Reproductive issues in breeding animals (gilts, sows and boars)
  - Respiratory issues in pigs of any age
- In 2013, it was estimated that the cost of PRRS is \$664 MILLION annually to the pork industry

# What is SECD??

- **Swine Enteric Coronavirus Disease, includes:**
- Porcine Epidemic Diarrhea Virus (PEDv)
  - Severe diarrhea in pigs of all ages
  - Vomiting
  - High mortality – almost 100% in weaned pigs - estimated losses of over 5 million pigs from Sept. 2013 to Aug. 2014
- Porcine Delta Coronavirus – similar to PEDv

# PCR – What is it and what does it do?

- Polymerase chain reaction – PCR
- Used to directly detect presence of pathogen
  - Tissues
  - Fluids (blood, oral fluids, etc.)
  - Other biological materials (feces)
- Positive farms (vaccinated, previously infected)
  - will detect until pigs clear viremia (usually 28 days)

Dr. Marcelo Almeida, Iowa State University

# Serology – What is it and what does it do?

- **ELISA (Enzyme-linked immunosorbent assay)**
- Study of serum and other bodily fluids.
- Detects antibodies against target pathogen (previous exposure, but viruses may no longer be there)
- Antibodies: formed in response to an infection

Dr. Marcelo Almeida, Iowa State University

# PCR – Sample types – Iowa State

## PRRSv

- Serum
- Oral Fluids
  - Wean to finish
  - Group housed sows
  - Individually housed sows
  - Litters – Family oral fluids
- Processing fluids

## PEDv and PDCoV

- Feces
- Oral Fluids
- Can run combined PCR for PED/PDCoV for \$25

**PCR Cost – IA State - \$25.00**

Dr. Marcelo Almeida, Iowa State University



# ELISA – Sample types – Iowa State

## PRRSv

- Serum
- Oral Fluids
  - Wean to finish
  - Group housed sows
  - Individually housed sows
  - Litters – Family oral fluids

## PEDv and PDCoV

- Serum (IgG) – PEDv and PDCoV
- Oral Fluids (IgA) - PEDv
- Colostrum (IgG) - PEDv
- Milk (IgA) – PEDv

**ELISA costs:** \$5.00 (PRRSV ELISA X3), \$7.50 (PRRSV ELISA oral fluids), \$7.50 each (PED ELISA, PDCoV ELISA)

Dr. Marcelo Almeida, Iowa State University

# Wisconsin Vet Diagnostics Lab

<u>Test</u>	<u>Test Set Up</u>	<u>Cost</u>
PRRS ELISA - Oral fluid	Wednesday	\$10
PRRS PCR – tissues, serum	Tuesday/Thurs.	\$44.72
SECD PCR* - Oral fluid	Tuesday	\$65

\*includes PEDV, TGEV, PDCoV



**Wisconsin Veterinary  
Diagnostic Laboratory**  
UNIVERSITY OF WISCONSIN-MADISON

# Oral Fluids Collection



# Cotton ropes

- Rope can typically be purchased from farm supply or hardware stores.
- Other sources include [www.knotandrope.com](http://www.knotandrope.com) (½” cotton rope - \$0.40/foot; 5/8” cotton rope - \$0.65/foot.)
- Sample tubes can be obtained from the vet clinic you will submit the samples through.
- **Pre-made test kits can be purchased from ITL Biomedical.** These kits include the rope, plastic bags, collection tube, and gloves. They only sell by the case – 36 kits for \$189 plus shipping.  
<https://shop.itlanimalhealthcare.com/collections/animal-healthcare/products/tego-swine-oral-fluids-kit> or call 1-888-411-2851 or 703-435-6717.

# Collecting Oral Fluid

1. Collect first thing in the morning (pigs are most active)
2. Use cotton rope
3. Adjust rope to pig size
4. Extract fluid from rope
5. Pour fluid into a tube → chill or freeze
6. Send for testing



# County Fair Testing - 2017

- 12 fairs tested
  - PRRS PCR – all negative
  - PRRS ELISA – 9 fairs ran test, all were positive
  
  - PEDv/PDCoV PCR – all negative
  - PEDv ELISA – 2 of 7 fairs tested positive

# Resources

- Webinars – with UW-Extension
  - Fairs – recorded and posted at [wppa.org](http://wppa.org).
  - Rule introduction/testing – recorded and posted at [wppa.org](http://wppa.org).
  - March 8 – Dealing with a PRRS Positive Herd
    - Dr. Gary Onan, UW-River Falls
    - Dr. Art Mueller, Stateline Ag

# Resources – Testing Reimbursement

- \$25 grants to pork producers to help offset costs of testing, quarterly
- The following requirements and stipulations apply:
  - Reimbursement form must be submitted
  - Must include documentation showing proof of test completion
    - Proof of test could include a dated copy of a veterinary clinic bill that shows a line item for PRRS/SECD testing or a dated copy of a test report from a veterinary diagnostic lab (test results can be blacked out; proof of testing completion is all that is required for reimbursement).



# Important Tips for youth exhibitors

- Understand the status of your pigs – either pigs purchased or pigs on your farm
- Practice good biosecurity
- Testing will cost less than sick pigs



# Biosecurity

- Doing everything you can to reduce the chance of infectious disease being carried on your farm by animals, people, equipment or vehicles.
- Biosecurity starts when you purchase your project.
- Pigs susceptible to lots of diseases.
  - Direct – nose to nose contact, coughing, dust, manure, semen
  - Indirect – trailer, sorting panels, scale, show equipment
  - Vector – mosquito, ticks

# General Tips

- Isolation – house new or returning pigs separately
- Cleaning and Disinfection
  - Clean facilities, trailers, equipment, clothes, animals
  - Remove bedding
  - After cleaning, disinfect and fully dry
- Minimize exposure to people and other traffic
  - Limit visitors or wear clean clothing and boots
  - Limit off farm vehicles
- Control of wildlife, birds and pests

# Resources

- DATCP Swine Health Rule information
  - [https://datcp.wi.gov/Pages/Programs\\_Services/SwineMovement.aspx](https://datcp.wi.gov/Pages/Programs_Services/SwineMovement.aspx)
- Wisconsin Pork Association
  - [www.wppa.org](http://www.wppa.org)
- Champions Guide to Biosecurity

# QUESTIONS?