



United States Department of Agriculture

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A BLISTERY MYSTERY

Joanna Davis, D.V.M.

Emergency Coordinator-Georgia and Florida

SPRS District 2

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HOW TO DISRUPT 4TH OF JULY

- Morning of July 3, vesicular lesions on 10 sows reported by GW Packing's corporate vet, Dr. Delay to GA Dept of Ag.
- Owner noticed on 6/29 that a few sows had gone off feed and sores on snouts were seen in one barn. Lameness noted.
- More animals affected by 7/1 and Mr. Farmer contacted Dr. Delay.
- ***48 hrs from AV learning of lesions until reporting to SAHO***
 - AD initiated IES accreditation violation investigation

FARM DETAILS

- 2300 swine on premise. Breeder and farrowing operation. 100% confinement, shower in/shower out. Open sided barns, severe roach and rodent infestation. Birds in barns. Cattle, goats, horses, dogs and cats on farm.
- Received 96 gilts from GW gilt farm in Nicholls, GA in 2 shipments on 6/24 and 6/26. Gilts distributed to multiple barns upon arrival
- Shipped 1100 weaned pigs to GW nursery facility in Lenox, GA on 6/26 and 7/1.

CANCEL ALL PLANS...



Dr. Davis has an internal panic attack...







CLINICAL FINDINGS

- Visited 5/23 barns. Est. 50% affected with lesions
 - Lameness noted on most animals
 - Some neonates seemed systemically affected, febrile?
 - Ambient temp/humidity both in upper 90s
 - Coronary bands extremely hyperemic, not “classical” vesicles, skin over vesicles very fibrous
- ** Other species checked for lesions**

DIAGNOSTIC SAMPLING

- Rule outs
 - Foot and Mouth Disease
 - Vesicular Stomatitis
 - Vesicular Exanthema of Swine
 - Seneca Valley Virus
 - Circovirus
- Blood, tissue, vesicular fluid, whole carcass from neonate submitted
- Priority 1 (NVS ordered airplane to pick up samples in Tifton, GA 6:50 am 7/4/15)

The image shows a FedEx US Airbill form for a Priority 1 shipment. The form is titled "FedEx US Airbill" and includes the tracking number "8986 9057 0473". The sender's name is "USDA/APHIS/FADDL" and the recipient's name is "FAD Priority 1,2,A". The address is "Orient Point Warehouse, 40550 Rte 25, 579 Edwards Ave, Calverton, NY 11933". The form includes sections for "Express Package Services", "Packaging", "Special Handling and Delivery Signature Options", and "Payment info". The word "SAMPLE" is printed in large letters across the bottom of the form.

FADDL RESULTS 5:30 PM 7/4/15

Priority 1 / 15GA0010			
Diagnostic Test	Target	Result	ETA
3ABC	FMD Non-structural antibodies		5-Jul
VIAA	FMD Non-structural antibodies		5-Jul
cELISA	VSV antibodies	NEGATIVE	4-Jul
IFA	Vesicular exanthema of swine antibodies	NEGATIVE	4-Jul
PCR	FMD virus	NEGATIVE	4-Jul
PCR	Vesicular stomatitis virus	NEGATIVE	4-Jul
PCR	Swine vesicular disease virus	NEGATIVE	4-Jul
PCR	Vesicular exanthema of swine virus	NEGATIVE	4-Jul
PCR	Seneca Valley virus	POSITIVE	4-Jul
Virus Isolation	Viral amplification		11-Jul



Safeguarding Animal Health



EPIDEMIOLOGY

- Traces to and from TEN farms in 3 states
 - Move gilts from Alabama in 1-3 times/month, NO ISOLATION BARN
 - Move 300-1200/week weaned piglets to farms in Georgia, Alabama
 - Finishing operations in Georgia, Alabama, South Carolina
 - Slaughter plant for all pigs in South Carolina
- Corporate veterinarian in North Carolina
- Family owned farm, seven employees (none of which own their own swine)
- Breeding to weaning operation
- Typical vaccines, deworming, iron administered on schedule
- Banamine administered to sows off feed
- Animals had been commingled between barns after clinical signs noticed

BIOSECURITY “PLAN”

Biosecurity practices:

- Do you have a written biosecurity plan in place? Yes No
- If No, do you make a point to practice biosecurity on your operation? Yes No
- Does the plan address?
 - Entrance and exit locations for humans and animals Yes No
 - Movement of people between animal housing locations Yes No
 - Appropriate human attire when interacting with animals Yes No
 - Diseases that can be passed between humans and animals Yes No
 - Movement of animals between housing groups Yes No
 - Location for quarantine of animals Yes No
 - Pest control - both rodent and insects Yes No
 - Management of and proper disposal of mortalities Yes No
 - Waste control Yes No
 - Disinfection and cleaning protocol Yes No
 - Movement of vehicles on and off the premises Yes No
- Do you have a response plan for a disease outbreak? Yes No



ACTUAL BIOSECURITY

- While there was shower in/out, it was very dirty
 - “Clean” side boots were very dirty-feces, dirt
 - Wondered if myself and other VMOs the only ones who had used it recently...
- I’ve never seen such a severe roach infestation! Also rodents, lots of birds in and out of houses. Crates pretty clean, lots of feed on floors
- Incoming animals (usually gilts) not isolated from the rest of the herd, put in houses where there was room for them as they arrived
- Owners did not really utilize any PPE
- Owners did control vehicle traffic on and off farm
- Other livestock species commingled in nearby pastures
- Most likely feral swine in area, but no evidence of breaches

FOLLOW UP VISITS

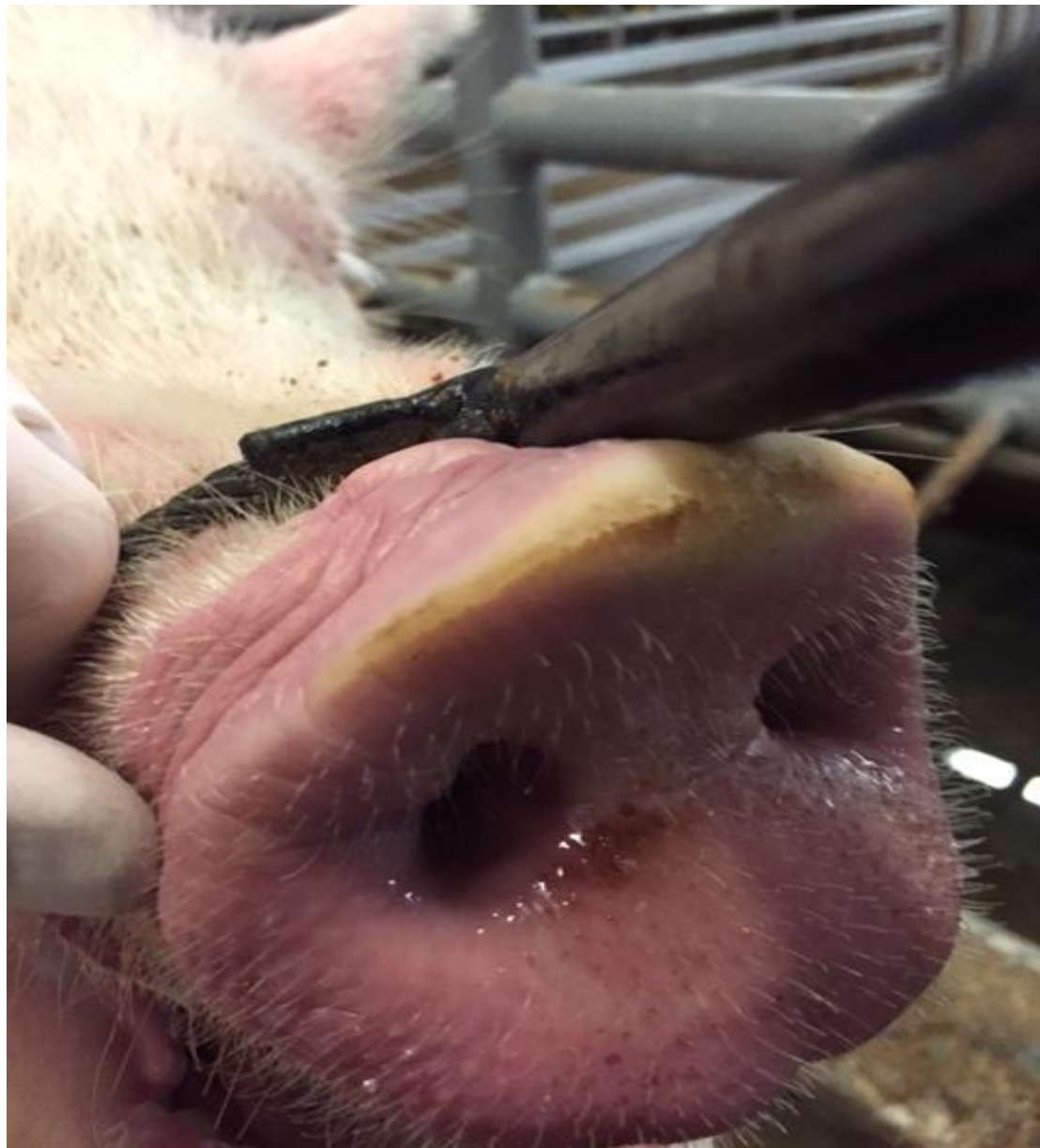
- Farm remained quarantined nearly 3 weeks
- All clinical signs had resolved
- Visits made to local nursery farms to which weaned pigs would have recently been delivered
 - no active lesions, +/- healed?
- GA State Veterinarian did allow controlled movement of weaned pigs on their regular schedule (Wed., July 8, 15, 22) to keep pigs from overcrowding
 - State inspector visited each load of pigs prior to movement, 1-27 issued
- Blood collection from known positive animals to bank serum/blood for testing

SVA CASE AT TN SLAUGHTER PLANT











SENECAVIRUS A

- Of the RNA family of viruses called *Picornaviridae*, just like Foot and Mouth Disease and Swine Vesicular Disease
- Reported in U.S., Canada, Australia, New Zealand, Brazil. Seen in 23 states. This was first confirmed case in GA.
- Often breaks out following stress (i.e. movements, weaning, etc)
- Non-zoonotic
- Rule outs
 - FMD, VS, SVD, VES, circovirus, non-infectious, chemical, toxin

SENECAVIRUS A

- Incubation period currently unknown
- Herd morbidity has ranged 5-80%
- Little to no mortality, maybe in neonates
 - In my case, affected neonates seemed to be more depressed, weaker, poor body condition
- Stress/movement or comorbidities may play a role in more severe manifestations, warmer weather?
- Preferred samples for submission:
 - Vesicular fluid, vesicular epithelium, vesicular lesion swabs
 - Blood/serum? Tests being developed
- **VS Memo 7406.2** “Recommendations for Swine with Potential Vesicular Disease” *(VS see email from Troy Bigelow April 19, 2016)*

TAKE HOME MESSAGES

- SVA vesicles can look just like FMD, VSD
- Accredited veterinarians *MUST* report all vesicular lesions to SAHO/USDA per 9 CFR 161.4 so that FMD may be ruled out
 - Reminders in NVAP presentations/orientations/industry
- *Outstanding service/cooperation between FADD, FADDL, NVS, ICG for a Priority 1 on a holiday*
- Many unknowns remain about the disease but studies are underway
- Testing for SVA is being developed
- Industry (or just this AV) know they have SVV but **don't** report
 - GAMBLING WITH HEALTH OF ANIMALS, TRADE, ECONOMY
- Other??

QUESTIONS?

Joanna.S.Davis@aphis.usda.gov

(678)215-7627

