Biosecurity
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Plan of the conference

- Gene introduction principles
- Health monitoring policies
- Management of positive samples
- Biosecurity principles
- Researches
- Network principles

Biosecurity Principles
- Pig Movement Policy
- Location Policy
- Transportation Policy
- Other policies
- Management of biosecurity

Transport policies:
a) Farrow to Finish units.
- Wean piglets move from farrowing to nursery rooms under cover walkway.
- Movements from nursery to finishing rooms under cover walkway.
- Sale - Use of a load out room to ship the gilts, barrows and culls, using our own trucks.

Transport policies:
b) Site 1 and wean to finish unit.
- Wean piglets are move from farrowing to nursery with a in site trailer washed, disinfected with a downtime of 3 nights after shipment.
- Movements from nursery to finishing rooms under cover walkway.
- Sale - Use of a load out room to ship the gilts, barrows and culls, using our own trucks.

Transport policies:
3 sites units.
- Truck exclusive to movements between site 1 to site 2 and site 2 to 3.
- Two nights downtime between movements.
- Workers in site 1 load the piglets, workers in site 2 unload piglets.
Transport policies:
3 sites units.

- Workers in site 2 load the piglets, workers in site 3 unload the piglets
- Sale - Use of a load out room to ship the gilts, barrows and culls, using our own trucks.

Transport policies:
Quarantine.

- Replacements are unload in a isolated, wash and desinfected quarantine.
- When the quarantine is release, the animals are load with our own trucks.
- Workers in the farrow unite unload the pigs.

Pig Movement Policy

- Quarantine/Isolation (8 weeks minimum)
- Load out room

Location Policy
- Locate in low hog dense areas
- Locate away from hog traffic
- Yard security

Pig transportation policy
- Clean up procedure certify and validate
- Transportation rules
- Truck wash specification

Other policies
- People policy
- Material / supply introduction policy
- Biological / medication policy
- Rodent and bird
OTHER POLICIES (continue)
- Dead animal
- Feed manufacture and transport policy
- Maintenance policy
- Manure handling policy
- ETC...

Management of biosecurity
- Manual of policies
- Training (all team)
- Dedicated supervisor
- “Culture”

Network principles
- Goals:
  - The supply must not depend on one network
  - The production requirement is split in many networks from nucleus to multiplier and for all lines of products.

Gene introduction principles
- No method has been proven to be 100% safe
- E.T. seems to be the best method, but?
- Our biosecurity concept has multiple securities

Gene introduction principles
- Semen supply policies
  - on farm boar inventory
  - nucleus supply
- Replacement policies

Health Monitoring Policy
- Daily monitoring in A.I.C.
- Monthly monitoring in all other farms
- Weekly and monthly veterinary visit

Health Monitoring
- Requirement for authorization of sale
  - Serology done within the last 4 weeks
  - Veterinary visit
  - Slaughter check
  - No clinical sign report

Health Monitoring Policy

Management of diagnostics:
- Health program technicians
- Dedicated technician
- Follow up from bleeding to results
- Daily report

Health Monitoring Policy

Agreement with laboratory:
- High quality laboratories
- Communication of quality control of test kit
- Application of Genetiporc policies
- Define turn around for each test and retest

Management of positive sample

Step no 1:
- Immediate call to vet in charge
- Retest procedure and daily follow up
- Stop movement in and out of this site
- Review movement around this site and link

Management of positive sample

Step no 2: (laboratory)
- Retest the same sample with the same test
  - If stay positive follow the next step
- Retest the same sample with a second test
  - PRRS : IFA and PCR
  - Mycoplasma : elisa Daco and or Idexx

Management of positive sample

Step no 2: (laboratory)
- Retest the same sample with a second test
  - TGE : no other test
  - SIV : HI and elisa

Management of positive sample

Step no 2: (laboratory)
- Retest the same sample with a second test
  - APP : no other test
  - Toxigenic Pasteurella (rhinitis) : bacteriologic culture, Daco, NADC dot blot analysis
Management of positive sample

Step no 3: (veterinary in charge)
- Send copy of the serum bank to second lab
- Rebleed the positive and at least 20 others around

Management of positive sample

Step no 3: (veterinary in charge)
- Send the serums to 2 labs
- Run 2 tests if available
- Clinical evaluation of the farm

Management of positive sample

Step no 4:
- if negative on 2 tests
- Reopen sales and movement

Management of positive sample

Step no 4: if positive at 2 labs
- Health committee conference call
  - 4-5 vets, production director, supervisor, transport director, sale director
- Action plan with schedule

Management of positive sample

Step no 4: If positive at 2 labs
- Retest all sites that had link with the + site
- Inform customer that had link with the + site

Management of positive sample

Step no 5: action with infected farm
- Isolation
- Investigation (task force)
- Depopulation and/or eradication plan

Management of positive sample

Step no 5: PRRS
- Depopulation for multiplication
  - If not, stop producing breeding stock
- Genomic analysis of the strain
- Eradication for commercial only

Management of positive sample

Step no 5: Mycoplasma and TGE
- Eradication for site 1 (farrowing unit)
- Depopulation for nursery/finishing

Management of positive sample

Boar stud:
- Stop semen flow
- Reduce concentration of semen from 3 to 2 billions cells in other studs
- Use on farm boars

Management of positive sample

Boar stud: if positive at 2 labs
- Depopulation

Management of positive samples

Clinical signs:
- Any suspicious clinical signs is manage like a positive sample
- Investigation process start at step no 1

Management of positive sample

Suspicious clinical sign:
- Cough and respiratory
- Diarrhea and enteric
- Abortion and reproductive
- Mortality, off feed, etc...

Management of positive sample

Suspicious clinical sign:

General investigation
- Detection (training)
- Communication (farm manager - vet - supervisor)
- Records (ID, pen, signs, treatment, response)
Management of positive sample

Suspicious clinical sign:

General investigation
- Ear tag pigs with clinical sign
- Medication allowed

Management of positive sample

Suspicious clinical sign

diagnostic

Necropsy:

Virology: PCR or FA or Virus isolation

Bacteriology: culture and serotyping

Histopathology

Management of positive sample

Suspicious clinical sign

diagnostic

Serology:

minimum of 2 weeks after clinical signs

Treatment response