

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 nigths 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 disinfected 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*

Pig transportation policy

- *Trailer specification*
- *Inspection policies and certification of the process*

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