What Should I Send to the Lab and How Should I Send it?

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- Swine necropsies performed daily
- We want you to get the most out of your swine submissions
Swine Necropsy & Tissue Selection

- Swine necropsy techniques
- Proper tissue selection
- What are you looking for?

Which animals should be presented for necropsy?

- Fresh
- Animals that are acutely affected
  - no culls, or animals that have been sick for several days
- Animals showing the typical symptoms
Porcine Abortion

- 4-6 fresh/chilled whole aborted fetuses
- Placenta
- Acute and convalescent serological survey may help

Sampling Tips

- Do NOT freeze fetuses!
- Submit placentas & umbilical cords if possible
- Wash feces off fetuses and placentas
Porcine CNS Disease

- Meningeal swab and/or CSF fluid collected prior to brain removal
- Brain
  - 1/2 fresh,
  - 1/2 formalin fixed
- Spinal cord
  - several 10cm pieces fresh,
  - several 0.5cm sections from 4-5 different levels formalin fixed

Porcine CNS Disease - Continued

- Tonsil
  - 1/2 fresh/chilled,
  - 1/2 formalin fixed
- Ileum
  - two 10 cm pieces fresh,
  - four 1 cm pieces formalin fixed
Porcine Enteritis-Suckling Pigs

- Use 3-4 acutely sick, untreated pigs
- Colon & Cecum
  - entire organ fresh/chilled,
  - several 1 cm pieces formalin fixed
- Ileum
  - two 10-15 cm segments fresh/chilled,
  - four 1 cm pieces formalin fixed

Porcine Enteritis-Suckling Pigs-continued

- Jejunum
  - two 10-15 cm pieces fresh/chilled,
  - four 1 cm pieces formalin fixed
- Intestinal sections with gross lesions
  - 10-15 cm section fresh,
  - several 1 cm pieces formalin fixed
Comments & Sampling Techniques

- Chill, Do NOT freeze intestines!
- Always package intestines separately from other tissues
- Package small intestine and colon separately

Porcine Enteritis-Nursery & Grow-Finish

- Ileum
  - two 10 cm sections fresh/chilled,
  - four 1cm sections formalin fixed
- Jejunum
  - two 10 cm sections fresh/chilled,
  - four 1 cm sections formalin fixed
Porcine Enteritis-Nursery & Grow-Finish-Continued

- Cecum & colon
  - entire organ,
  - or two 10 cm segments of spiral colon fresh/chilled,
  - four 1 cm pieces formalin fixed
- Visible lesions
  - 10 cm fresh, several pieces formalin fixed
- Feces
  - 10 ml chilled

Porcine Enteritis-Nursery & Grow-Finish-Continued

- Mesenteric lymph nodes
  - fresh & formalin fixed
- Liver
  - 1/4 organ fresh,
  - 3 slices formalin fixed
- Stomach
  - examine for & submit lesions
Comments & sampling tips

- Collect all other organs before intestines to prevent fecal contamination
- Package small intestines separate from large, and GI tissues separate from all other tissues
- Samples must be taken immediately after death to minimize autolysis

Porcine Pneumonia

- Brain
  - 1/2 fresh/chilled
  - 1/2 formalin fixed
- Upper respiratory tract
  - Bronchial swab
  - Turbinate scroll formalin fixed
- Lung
  - Entire side of generous portion
  - Five 1cm slices formalin fixed
Porcine Pneumonia—continued

- Tracheobronchial lymph nodes
  - 1/2 fresh
  - 1/2 formalin fixed

- Tonsil
  - 1/2 fresh
  - 1/2 formalin fixed

Miscellaneous Conditions

- Multisystemic Wasting Syndrome
  - Lymph nodes
    - fresh/chilled, formalin fixed
  - Ileum
    - fresh/chilled, formalin fixed
  - Lung
    - fresh/chilled, formalin fixed
Porcine Dermatitis & Nephropathy Syndrome

- Kidneys
  - fresh/chilled, formalin fixed

- Skin
  - formalin fixed

Pet Peeves

- ALWAYS TRY TO PRESERVE THE TISSUE ASSOCIATED WITH THE SYMPTOMS THAT YOU OBSERVE
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