



AHL LabNote Number 30

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Undifferentiated diarrhea in pigs, including PEDV and PDCoV testing at the AHL

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The AHL encourages veterinarians to submit samples from any cases of undifferentiated diarrhea. **We recommend that the triplex porcine coronavirus PCR for PEDV, TGEV, PDCoV (deltacoronavirus) be done BEFORE submitting animals to the lab for postmortem where diarrhea is a clinical sign.**

Submissions for pigs with vomiting and diarrhea should include the samples listed below. **Take gut samples as soon as possible after euthanasia and place in formalin** to achieve optimal TGEV IHC test performance.

Tissue	Fresh	Formalin-fixed
stomach	✓	✓
duodenum		✓
jejunum	✓ (X 2)	✓ (X 3)
ileum	✓	✓ (X 3)
cecum		✓
spiral colon	✓ (X 2)	✓
mesenteric LN		✓
other - liver, kidney, spleen, lung		✓
feces (leak-proof vial or swab),	✓	
TESTS		
Histopathology		Routine histopathology
		IHC for TGEV, PCV-2
Bacteriology	Colon or feces (NO swabs) for <i>Brachyspira</i> spp., <i>B. hyodysenteriae</i> , <i>B. pilosicoli</i> , <i>B. hampsonii</i> clade I and <i>B. hampsonii</i> clade II PCR.	
	Ileum or feces (NO swabs) for <i>Lawsonia intracellularis</i> PCR.	
	Intestinal tissue/content, feces, or fecal/intestinal swabs for aerobic (<i>E. coli</i> and <i>Salmonella</i> spp.) and anaerobic (<i>C. perfringens</i>) culture.	
	Feces or intestinal content (NO swabs) for <i>C. difficile</i> toxins ELISA.	
Virology	Live - fecal swab in VTM (preferred) or feces - Porcine coronavirus PCR (PEDV, TGEV, PDCoV), porcine rotavirus A/B/C PCR.	
	Dead - PCV-2 PCR, rotavirus A/B/C PCR, porcine coronavirus PCR (PEDV, TGEV, PDCoV) on frozen small intestine or feces.	
Serology	PEDV ELISA and IFA are available at external laboratories and the AHL can send sera on request. Sera from dam, surviving litter/herdmates for differential TGEV/PRCV ELISA (does not detect PEDV antibodies).	
Parasitology	Fecal exam optional (histology can be diagnostic).	