

DISEASE	SPECIMEN	MEDIUM	LAB
<b>African Horse Sickness</b>			
<b>Equine (including Zebra)</b>	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Fresh Tissue: Spleen, LN, Lung	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues	Formalin (10:1)	
<b>African Swine Fever</b>			
Swine	Serum	Red Top Tube (10ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Fresh Tissue: Tonsil, Gastrohepatic LN, Renal LN, Spleen	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues	Formalin (10:1)	
<b>Aino and Akabane<sup>1</sup></b>			
<b>Bovine Ovine Caprine</b>	Serum from fetus and dam	Red Top Tube (10 ml)	FADDL or NVSL - Ames
	Fresh tissue: Placenta, fetal muscle and nervous tissue	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues	Formalin (10:1)	
<b>Avian Influenza – Highly Pathogenic</b>			
Avian	Serum	Red Top Tube (2ml)	NVSL - Ames
	Tracheal Swab	Dacron Swab in BHI broth (3.5 ml) (can pool up to 5 swabs), do not pool tracheal and cloacal swabs together	
	Cloacal Swab	Dacron Swab in BHI broth (3.5 ml) (can pool up to 5 swabs), do not pool tracheal and cloacal swabs together	
	Fresh Tissue (liver, spleen, kidney, lung, terminal intestine)	For Each Bird: 1 whirlpak with intestine 1 whirlpak with pooled lung, liver, spleen and kidney	
<b>Bluetongue<sup>1</sup> &amp; Epizootic Hemorrhagic Disease<sup>2</sup></b>			
<b>Bovine Ovine Caprine Cervid</b>	Serum	Red Top Tube (10ml)	NVSL – Ames or FADDL (if vesicular lesions)
	Whole Blood from dam and newborn	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Fresh tissue (dam): spleen, bone marrow	Separate Whirlpak Bags	
	Fresh tissue (newborn): spleen, lung, brain	Separate Whirlpak Bags	
	Set of Tissues	Formalin (10:1)	
<b>Blue Eye Paramyxovirus</b>			
Swine	Serum	Red Top Tube (10ml)	NVSL-Ames
	Whole Blood from dam and newborn	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Nasal Swab	Dacron swab in TBTB (max 3 ml)	
	Fresh tissue (brain, spinal cord, lung, tonsil, spleen, reproductive tissues from sexually mature animals)	Separate Whirlpak bag per tissue type	
	Set of Fixed Tissues (brain, spinal cord, lung, tonsil, spleen)	Formalin (10:1)	

<sup>1</sup>Virus isolation, PCR and serology are done in Ames. PCR and serology are done at FADDL.

<sup>2</sup>Virus isolation, PCR and serology are done in Ames. Serology is done at FADDL.

Bovine Ephemeral Fever			
Bovine	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Set of Tissues	Formalin (10:1)	
Bovine Spongiform Encephalopathy			
Bovine	Minimum for surveillance: Fresh Obex	50 ml tube or Whirlpak Bag	Contract Lab
	Complete FAD Investigation (after Rabies Tests) Fresh Obex and ½ Brain	Whirlpak Bag	NVSL - Ames
	½ Brain	Formalin (10:1)	
Classical Swine Fever			
Swine	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Dacron Swab: Nasal	TBTB (3 ml)	
	Tonsil Scraping (with Teaspoon)	TBTB (5 ml)	
	Fresh Tissue: Tonsil, Mandibular LN, Mesenteric LN, Spleen, Kidney, Distal Ileum	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues Including Brain	Formalin (10:1)	
Contagious Agalactia			
Ovine Caprine	Serum	Red Top Tube (10ml)	FADDL
	Dacron Swab: Nasal	BHI (3 ml)	
	Milk, Joint Fluid, Pleural Fluid, Pericardial Fluid	Sterile Tube or Red Top Tube	
	Udder & Associated LN, Lung	Separate Whirlpak Bags	
	Set of Tissues	Formalin (10:1)	
Contagious Caprine Pleuropneumonia			
Caprine	Serum	Red Top Tube (10ml)	FADDL
	Pleural Fluid	Sterile Tube or Red Top tube	
	Fresh tissue: Lung, Mediastinal LN	Separate Whirlpak Bags	
	Set of Tissues	Formalin (10:1)	
Contagious Bovine Pleuropneumonia			
Bovine	Serum	Red Top Tube (10 ml)	FADDL
	Pleural and Joint Fluid	Sterile Tube or Red Top Tube	
	Fresh tissue: Lung, Tracheobronchial LN and Mediastinal LN	Separate Whirlpak Bags	
	Dacron Swab: Nasal and Tracheobronchial	BHI (3ml)	
	Set of Tissues	Formalin (10:1)	

Foot and Mouth Disease			
<b>Bovine</b> <b>Swine</b> <b>Camelids</b> <b>Cervid</b> (including cloven-hoofed zoo animals & wildlife)	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Vesicular Tissue (vesicular epithelium – as large as practical)	Whirlpak Bags or TBTB (3 ml)	
	Vesicular Fluid	Sterile Tube or Red Top Tube (undiluted) or TBTB (50:50)	
	Dacron Swabs: Lesion, Nasal and Oral	TBTB (3 ml)	
	Esophageal-Pharyngeal Fluid (Probang)	TBTB (50:50)	
	Crusts/Scabs	Tube or Whirlpak Bags, no media	
	Fresh Tissue (esp. Lymph Node)	Separate Whirlpak Bags	
	Set of Tissues	Formalin (10:1)	
Heartwater*			
<b>Bovine</b> <b>Ovine</b> <b>Caprine</b> <b>Cervid</b>	Serum	Red Top Tube (10 ml)	NVSL – Ames
	Whole Blood	Purple Top Tube (10 ml)	
	Brain Smear	Air dry before packaging. If receipt at lab to be > 24 hrs, fix with methanol before shipping. Note on paperwork if slide is fixed.	
	Fresh tissue (lymphoid tissues, brain, kidney)	Separate Whirlpak Bag per tissue	
	Set of Tissues (lymphoid tissues, brain, kidney)	Formalin (10:1)	
Lumpy Skin Disease			
<b>Bovine</b>	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Skin Biopsy	TBTB (3 ml)	
	LN Aspirate	TBTB (3 ml)	
	Fresh Tissues: Skin, LN, Lung	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues	Formalin (10:1)	

\*FADDL tests import cases from FMD-endemic countries.

DISEASE	SPECIMEN	MEDIUM	LAB
<b>Malignant Catarrhal Fever</b>			
<b>Bovine</b> <b>(Including wild ruminants)</b>	Serum	Red Top Tube (10 ml)	NVSL – Ames or FADDL (if vesicular lesions)
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Fresh Tissue: Spleen, lung, LN, Thyroid, Adrenal, Cornea, Liver & Kidney	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues	Formalin (10:1)	
<b>Newcastle Disease - Exotic</b>			
Avian	Serum	Red Top Tube (2ml)	NVSL- Ames
	Tracheal Swab	Dacron Swab in BHI broth (3.5 mo) (can pool up to 5 swabs), do not pool tracheal and cloacal swabs together	
	Cloacal swab	Dacron Swab in BHI broth (3.5 mo) (can pool up to 5 swabs), do not pool tracheal and cloacal swabs together	
	Fresh Tissue (liver, spleen, kidney, lung, terminal intestine)	For Each Bird: 1 whirlpak with intestine 1 whirlpak with pooled lung, liver, spleen and kidney	
<b>Porcine Epidemic Diarrhea</b>			
Swine	Serum	Red Top Tube (10 ml)	NVSL- Ames
	Fresh Tissue (feces, ileum, jejunum, duodenum, multiple sections of large intestine)	Separate Whirlpak bag per tissue type	
<b>Peste des Petits Ruminants</b>			
<b>Ovine</b> <b>Caprine</b> <b>(Including wild small ruminants)</b>	Serum	Red Top Tube (10 ml)	FADDL
	Whole blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Dacron Swab: Nasal, Ocular, Oral, Fecal	TBTB (3 ml)	
	Fresh tissue: Bronchial LN, Mesenteric LN, Lung, Spleen, Intestinal Mucosa	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues	Formalin (10:1)	
<b>Rabbit Hemorrhagic Disease</b>			
Rabbit	Serum	Red Top Tube (5 ml)	FADDL
	Fresh Tissue: Liver, Spleen	Separate Whirlpak Bags	
	Set of Tissues	Formalin (10:1)	
<b>Rift Valley Fever</b>			
<b>Ovine</b> <b>Bovine</b> <b>Caprine</b> <b>Camelid</b>	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Fresh Tissue: Liver, Spleen, Brain, Placenta	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues	Formalin (10:1)	
<b>Rinderpest</b>			
<b>Bovine</b> <b>Swine</b> <b>(including zoo animals &amp; wildlife)</b>	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Dacron Swabs: Lachrymal, Oral, Fecal	TBTB (3 ml)	
	Fresh Tissue: Oral lesions, Mesenteric LN, Prescapular LN, Spleen	Separate Whirlpak Bag Per Tissue Type	
	Set of Tissues	Formalin (10:1)	

DISEASE	SPECIMEN	MEDIUM	LAB
<b>Sheep &amp; Goat Pox</b>			
<b>Ovine Caprine</b>	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Fresh Tissues: Skin, LN, Lung	Separate Whirlpak Bag	
	Skin Biopsy	TBTB (3 ml)	
	LN Aspirate	TBTB (3 ml)	
	Set of Tissues	Formalin (10:1)	
<b>Swine Vesicular Disease</b>			
Swine	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Vesicular Tissue (vesicular epithelium – as large as practical)	Tube or TBTB (3 ml)	
	Vesicular Fluid	Sterile Tube or Red Top Tube (undiluted) or TBTB (50:50)	
	Dacron Swab: Lesion, Nasal, Fecal	TBTB (3 ml)	
	Fresh Tissue: Skin, tongue and mucosa with lesions	Separate Whirlpak Bags	
	Set of Tissues	Formalin (10:1)	
<b>Teschen/Talfan</b>			
Swine	Serum	Red Top Tube (10 ml)	NVSL – Ames or FADDL (if CSF in differential)
	Fresh tissue (brain, spinal cord, lung, tonsil, spleen)	Separate Whirlpak bags per tissue	
	Set of Fixed tissues (brain, spinal cord, lung, tonsil, spleen)	Formalin (10:1)	
<b>Venezuelan Equine Encephalomyelitis</b>			
Equine	Serum	Red Top Tube (2 ml)	NVSL - Ames
	Whole Blood	Green Top Tube (2ml)	
	Brain, <b>cerebrospinal</b> fluid	Whirlpak bag ( <b>brain</b> ) and <b>red-top tube (CSF)</b>	
<b>Vesicular Exanthema of Swine</b>			
Swine	Serum	Red Top Tube (10 ml)	FADDL
	Whole Blood	Green Top tube (10 ml) Purple Top tube (10 ml)	
	Vesicular Tissue (vesicular epithelium – as large as practical)	Whirlpak Bags or TBTB (3 ml)	
	Vesicular Fluid	Sterile Tube or Red Top Tube (undiluted) or TBTB (50:50)	
	Dacron Swab: Lesion, Nasal, Oral	TBTB (3 ml)	
	Esophageal-Pharyngeal Fluid (Probang)	TBTB (50:50)	
	Fresh Tissues: skin, tongue and mucosa with lesions	Separate Whirlpak Bags	
	Set of Tissues	Formalin (10:1)	

DISEASE	SPECIMEN	MEDIUM	LAB
<b>Vesicular Stomatitis</b>			
<b>Bovine</b> <b>Swine</b> <b>Ovine</b> <b>Caprine</b> <b>Equine</b> <b>Camelid</b>	Serum	Red Top Tube (10ml)	<b>FADDL</b> <b>(Ruminant and Swine)</b> <b>&amp;</b> <b>NVSL - Ames</b> <b>(Equine)</b>
	Whole Blood (not for equine)	Green Top Tube (10 ml) Purple Top Tube (10 ml)	
	Vesicular Fluid	Sterile Tube or Red Top Tube (undiluted) or TBTB (50:50)	
	Vesicular Tissue (vesicular epithelium – as large as practical)	Whirlpak Bags or TBTB (max 3 ml)	
	Dacron Swab: Lesion, Nasal, Oral	TBTB (3 ml)	
	Esophageal-pharyngeal Fluid (Probang) (Not required for equine)	TBTB (50:50)	
	Fresh Tissue: Skin, Tongue and Mucosa with lesions	Separate Whirlpak bags per tissue	
	Crusts/scabs	TBTB (enough to moisten scab/crust)	
	Set of Tissues (not for equine)	Formalin (10:1)	

\*List of tissues to be placed in formalin – At a minimum, collect 1 cm thick sections of any lesion, trachea, esophagus, heart, lung, thoracic lymph nodes, liver, spleen, kidney, abdominal lymph nodes, bladder, stomach, duodenum, jejunum, ileum and colon. If neurologic signs, collect brain. If small lesion, put entire lesion in whirlpak for virology, NOT in formalin.

**DO NOT FREEZE SAMPLES - Submit Cool on Frozen Gel Pacs**