NDSU VETERINARY DIAGNOSTIC LABORATORY

Microbiology Collection Guide			
Source	**Temp***	**Collection Method**	**Container**
Blood	RT	Surgical prep- see "Blood Culture Collection" at vdl.ndsu.edu/resources	-Blood culture bottle or yellow top Isolator tube
Dermatophyte (Skin/Hair)	RT	-Clean lesion with 70% alcohol; pluck hair (include follicle)/crusts from edge of lesion -Toothbrush over coat	-Sealed bag
Eye	4°C	Corneal scrapings, swab of conjunctiva, or edge of corneal ulcer -Remove crusts/contaminants before sampling. -Topical dyes and anesthetics can interfere. Rinse eye prior to sampling. -Sample from unaffected eye can help interpret growth in affected eye if unilateral	Aerobic bacterial transport system -PLUS: Universal or viral transport media for mycoplasma, chlamydia, and viruses if suspected.
Feces	4°C	Per rectum or immediately collected from the ground	-Send 5-10 grams in sealed, leak-proof container or bag -Cary-Blair Transport medium acceptable only for culture
Fluid from sterile sites (CSF, joint, etc.)	RT	Surgical prep with percutaneous fluid collection or surgical sampling of synovium	-Sterile container, aerobic transport media, or Port-A-Cul (anaerobic) transport container if anaerobes are suspected
Lower respiratory	4°C	Transtracheal wash, bronchioalveolar lavage, tissue, aspirate	-Sterile container, aerobic transport media, or Port-A-Cul (anaerobic) transport container if anaerobes are suspected -If cytology is also desired, collect fluid in an additional EDTA tube or send slides. EDTA not acceptable for culture
Outer ear	4°C	Clear debris from canal with saline, then swab ear canal.	Aerobic bacterial transport system
Skin	4°C	-Surgical prep with biopsy or active inflammation or aspiration of pustules -Cleanse surface of skin with saline; swab the affected area. Do not touch unaffected areas	Aerobic bacterial transport system
Upper Respiratory	4°C	-Remove crusts and or debris. Swab nasal cavity or nasopharynx -Do not culture nasal passage to determine pathogen of lower respiratory tract	-Aerobic bacterial transport system -PLUS: Universal or viral transport media for mycoplasma, chlamydia, and viruses if suspected.
Urine	4°C no preservative, RT for grey top tubes	-Sterile prep of skin with cystocentesis -Mid-stream free catch after cleansing of genital region -Samples from indwelling catheter not recommended	-3-5 mL in sterile urine cup or red top tube (no preservative); refrigerate within an hour of collection -Grey top urine collection tube
Uterine	4°C for fresh, RT for biopsy	Clean external genitalia; sample uterus with double guarded swab. Biopsy with histopathology is recommended for breeding soundness exams to aid in culture interpretation	-Aerobic bacterial transport system for swab -Tissue in sterile container -10% formalin for biopsy (RT)

RT=Room Temperature, 4°C=Refrigeration/cold pack

***Temperature requirements indicate how the sample should be stored up to and during shipment. Refrigerated samples should be maintained with an ice pack during shipment. Ship all samples to the NDSU-VDL overnight whenever possible!**

NDSU VETERINARY DIAGNOSTIC LABORATORY

Molecular Diagnostics (PCR) Collection Guide Use sterile sample containers | Wear gloves when collecting and handling samples			
Source	**Temp***	**Collection method**	**Container**
Blood	4°C	70% alcohol prep with percutaneous blood collection.	-Purple top EDTA tube -Do not freeze
Dermatophytes	RT/4°C	-Pluck hair from lesion, include follicle -Crust, flakes, skin scraping	-Place sample in a tube or clean bag. Place sealed sample container in a secondary bag.
Feces	4°C	Directly from rectum -Johnes: See "Johnes Guide" at vdl.ndsu.edu/resources	-At least 2 grams (sleeve finger full) in well-labeled, sealed, leak-proof container or zip-top bag
Fluid	RT	Surgical prep with percutaneous fluid collection or surgical sampling of synovium	-Sterile container without preservatives
Preputial wash	4°C	-Remove extraneous material and soiled hair. Do not cleanse area with disinfectants (inactivates protozoa) -Sample should be light pink and cloudy with visible material and little blood/debris. -See "Tritrichomonas Collection Guide" at vdl.ndsu.edu/resources	-2 ml minimum volume -Well-sealed, sterile container. NO Whirl-paks, bags, or urine cups -Must be received within 5 days of collection
Serum	4°C (whole blood), 4°C or frozen for aliquoted serum	-70% alcohol prep with percutaneous blood collection in red-top or serum separator tube.	-Centrifuge sample and remove serum from clot (preferred). Send serum in sterile container
Swabs	4°C	Sterile synthetic swab with plastic shaft	-Single swab placed in red-top tube with saline. -Viral transport media -Dry swab in red-top tube (acceptable, not ideal)
Tissues	4°C	Select small piece of tissue with lesions of interest. Use sterile tools to collect.	-Sterile container/tube
Urine	4°C	-Sterile prep of skin with cystocentesis -Mid-stream free catch after cleansing of genital region	- 3-5 mL in sterile urine cup or red top tube (no preservative) for small animals; up to 50 mL for large animals. -Refrigerate within an hour of collection -Send to lab ASAP

RT=Room Temperature, 4°C=Refrigeration/cold pack

***Temperature requirements indicate how the sample should be stored up to and during shipment. Refrigerated samples should be maintained with an ice pack during shipment. Ship all samples to the NDSU-VDL overnight whenever possible!**