VETERINARY
DIAGNOSTIC LABORATORY

UNIVERSITY OF MINNESOTA
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Best practice sample submission

General microbiology specimen collection

- Inform the laboratory if the animal is being treated with antimicrobial drugs
- Please DO NOT submit syringes with needles
- Please clearly indicate source of all cultures, including method of collection for urine samples
- Urine, fluids, aspirates, and tissues may be submitted in a sterile plastic tube. Serum separator tubes (STT) are not appropriate for cultures.
- Culture samples should be refrigerated promptly to prevent overgrowth, with the exception of blood cultures and Tritrichomonas foetus cultures which should be kept at room temperature.
- Recent antibiotic therapy (within previous 2 weeks) may result in lower yield or negative cultures. Withdrawal from antibiotics for a minimum of 72 hours when culturing a patient following antibiotic administration.
- The Bacteriology Section does not pool samples with inherently high "normal" flora (e.g. fecal samples for aerobic culture.). These samples will be set up individually, reported individually, and charged individually.

Urine Cultures

- Better recovery of organisms is achieved from at least 5mL of urine collected by cystocentesis (preferred) or sterile catheter.
- A plain, plastic no-additive tube is the preferred tube type for urine cultures.
- Free catch urine samples should be avoided if possible to avoid contamination from distal portions of the urogenital tract normally colonized by numerous commensal organisms.
- Urine swabs are not recommended. Colony counts cannot be performed on urine swabs. Samples should be collected before administration of antimicrobial agents whenever possible

Source	Container/Storage	Protocol	Test
Abscess or Wound	BD Culturette™ or sterile tube	Aseptically prepare collection site. Aspirate fluid or pus from abscess, pustule or vesicular wounds.	Aerobic and/or Anaerobic Culture
Blood	One blood culture tube per time point. Do not submit swabs, serum or whole blood in LTT or RTT.	Collection using sterile technique is critical for accurate results. Aseptically prepare venipuncture site. Disinfect the top of culture bottle with alcohol and let dry. Ideally two samples drawn approximately one hour apart from different venous sites should be submitted.	Blood Culture

Source	Container/Storage	Protocol	Test
Bone Marrow, CSF	Sterile tube*	Aseptically prepare collection site, Collect CSF by aseptic subdural tap, ventricular aspiration or lumbar puncture.	Aerobic and/or Anaerobic Culture
Ears	Culturette	Posterior pharyngeal cultures may also reveal organisms causing otitis media. Note: Topical treatments may inhibit bacterial growth.	Aerobic Culture
Feces	Fecal culture transport media (preferred) or sterile container	Avoid contamination with urine and soil.	Aerobic, Anaerobic, Brachyspira, Campylobacter, and/or Salmonella culture
Joint Fluid	Sterile container or blood culture bottle. Keep at room temperature.	Aseptically inject fluid into sterile tube or blood culture bottle. Specimens >48 hours old are not suitable for culture.	Aerobic, Anaerobic and/or Mycoplasma*Culture
Nail, Skin or Hair	Sterile container, Culturette	Use sterile blade or swab to collect material from infected nail. Scrape or swab active border of skin lesions. Hair should be plucked (not cut) in order to include roots.	Aerobic and/or Fungal Culture
Sinus,	Culturette or sterile container	Aspirate from maxillary, frontal or other sinuses. Note: Chronic sinusitis often involves anaerobic bacteria.	Aerobic, Anaerobic and/or Mycoplasma*Culture
Tissue	Sterile container or whirl Pac bag	Place tissue in sterile container	Aerobic and/or Anaerobic Culture

Tracheal Wash/BAL	Sterile tube	Place wash fluid in sterile tube.	Aerobic and/or Mycoplasma*Culture
Bladder Wall	Sterile container	Rinse tissue off with sterile saline, then place in container with sterile saline	Aerobic Culture
Urine	Sterile container	Indicate collection method. Cystocentesis is strongly recommended (except in large animals). Avoid contamination with feces.	Aerobic Culture