

Standard Operating Procedure

SOP Number: **02-18-5625**

Service: **Research**

Operating Section: **Diagnostic Laboratory**

Unit: **CMF**

Title: **Specimen Collection for Microbiological Analysis**

Purpose:

To define appropriate microbiological sample collection.

Procedure:

- 1) Generally, samples to be submitted for microbial monitoring are retrieved and submitted using sterile culture swabs (culturettes). Culturettes have their own vessel with a moist end to prevent sample drying while in transport. Smaller cavities or PCR submissions may require the use of a sterile micro swab which can be placed, after sampling, in a sterile tube for lab submission.
- 2) Nasal or nasopharyngeal cultures
 - a) Nasal discharge will be collected directly onto a swab, making sure that the nasal cavity is entered as far as possible without causing undue pain or stress to the animal.
 - b) For nasopharyngeal cultures, a micro swab is gently passed through the nose into the nasopharynx, rotated and removed, then placed into a sterile tube.
- 3) Wound cultures
 - a) If the wound is closed (as in an abscess, for example) a sterile needle and syringe may be used to drain as much liquid as possible from the site. The contents of the syringe may be submitted in the syringe or may be expelled into a thioglycollate media tube or other sterile container.
 - b) For open wounds, culturette swabs may be used to sample wound exudate.
- 4) Throat cultures
 - a) A sterile swab should be inserted into the oral cavity to the caudal pharynx, depressing the tongue with a tongue blade and swabbing any lesions or exudate if present.
- 5) Ear cultures
 - a) A sterile swab is inserted into the ear canal, rotated, and removed. The canal should not be entered too deeply to prevent penetration of the tympanum.
- 6) Eye cultures
 - a) A sterile swab is used to culture the conjunctiva or the superficial cornea.
- 7) Stool cultures
 - a) Stool may be collected in a sterile container. If necessary a sterile swab can be inserted into the rectum, rotated, and withdrawn.
- 8) Urine cultures
 - a) Urine may be collected (in order of preference):
 - i) cystocentesis (preferred)
 - ii) urinary bladder catheterization
 - iii) free-catch (midstream, if possible)
 - b) Specimens should be collected into sterile containers and refrigerated or submitted immediately.
- 9) Blood or bone marrow cultures
 - a) Bone marrow samples are taken only under general anesthesia.
 - b) The skin over the sampling site is prepared as for a surgical procedure (povidone iodine or equivalent and isopropyl alcohol). The top of blood culture flasks are prepared identically.
 - c) Blood or bone marrow aspirate is collected into a sterile syringe; the needle is then removed and replaced with a sterile needle.

- d) If less than 4 ml is retrieved, the material is generally injected into a container for aerobic culture; otherwise, the sample is generally split into aerobic and anaerobic bottles.
- 10) Cerebrospinal fluid (CSF) cultures
 - a) CSF is collected via cervical or lumbar spinal tap under general anesthesia and submitted in the sterilized collection container.
- 11) Tissues cultures
 - a) Tissues collected for microbial analysis should be collected in a sterile manner from living animals (biopsy) or as soon after death (necropsy) as possible.

APPROVALS

Responsible Official Signature		<i>[Handwritten Signature]</i>	Date	12/06/2017
QA Signature	<i>[Handwritten Signature]</i>		Date	12/06/2017
Version #3	Effective Date	Supersedes #2	Original Date 05/31/01	