

SAMPLE COLLECTION:

# CEREBROSPINAL FLUID

## CONSIDERATIONS:

- Preferred euthanasia methods are electrocution, euthanasia solution, and CO<sub>2</sub>.
- Cerebrospinal fluid (CSF) must be collected prior to necropsy.
- Use personal protective equipment.
- Use sterile supplies to avoid sample contamination.
- Label samples with permanent marker.

## SUPPLIES:

- |   |  |
|---|--|
| <input type="checkbox"/> Knife              | <input type="checkbox"/> Cooler and icepacks |
| <input type="checkbox"/> 3 mL syringe       | <input type="checkbox"/> Submission form     |
| <input type="checkbox"/> 1.5" x 20 G needle | <input type="checkbox"/> Permanent marker    |
| <input type="checkbox"/> Sampling tube      |  |

## INSTRUCTIONS:



**1.** Place the pig on its chest (sternal recumbency).



**2.** Using a clean knife, cut and remove the skin from the middle of the neck to just in front of the pigs ears on the top of the head.



**3.** Flex the head downward at a 45-degree angle to expose the joint between the skull and first cervical vertebrae (atlanto-occipital joint).



**4.** With the bevel pointing upward, direct the needle and syringe at a 45-degree angle into the space. A slight "pop" may be felt when entering the space.



**5.** Slowly draw back on the syringe and collect up to 3 mL of CSF to avoid drawing blood and compromising sample quality. A clear-to-yellow fluid should flow easily.



**6.** Place the CSF into a labeled, sterile tube. Promptly refrigerate samples for shipment and submit to a veterinary diagnostic laboratory.

### COLLABORATORS:

These educational materials were developed through a collaborative process between Swine Medicine Education Center (SMEC) and Maria Clavijo, DVM, PhD. Created in 2022.

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