



**Wisconsin Veterinary  
Diagnostic Laboratory**  
UNIVERSITY OF WISCONSIN-MADISON

### Diagnostic Submission Guidelines for “bottle necropsy”

The best samples are collected within 4-8 hours of death, but it’s difficult to predict which cases will be diagnostic. Please collect both fresh and formalin-fixed tissues from any organ that has gross lesions. In addition, the following tissues are recommended for submission:

| Organ                    | Formalin* | Fresh | Size<br>Fresh Samples | Bag # |
|--------------------------|-----------|-------|-----------------------|-------|
| Heart                    | Yes       | Yes   | 4 x 4 cm              | 1     |
| Lung                     | Yes       | Yes   | 6 x 6 cm              | 1     |
| Liver                    | Yes       | Yes   | 6 x 6 cm              | 2     |
| Kidney                   | Yes       | Yes   | 4 x 4 cm              | 2     |
| Spleen                   | Yes       | Yes   | 6 x 6 cm              | 3     |
| Mesenteric<br>Lymph Node | Yes       | Yes   | Collect two           | 3     |
| Skeletal<br>muscle       | Yes       | No    |                       | N/A   |
| Tongue                   | Yes       | No    |                       | N/A   |
| Rumen                    | Yes       | No    |                       | N/A   |
| Abomasum                 | Yes       | Yes   | 10 - 20 cm length     | 4     |
| Ileum                    | Yes       | Yes   | 15 - 25 cm length     | 5     |
| Jejunum                  | Yes       | No    |                       | 6     |
| Spiral Colon             | Yes       | Yes   | 10 - 20 cm length     | 6     |

\*A ~1-2 cm thick or long sample from all the organs listed above should be placed in formalin. The ideal ratio is 9 parts formalin to 1 part tissue for proper fixation. The WVDL recommends using a 16 ounce wide mouthed jar that contains 8 ounces of 10% buffered formalin (Fischer catalog # 23-426-797). Since the formalin jars tend to leak; **please place inside 1-2 ziploc bags**. If you can’t formalinize tissues at the time of collection, we will do it for you. Please keep in mind that especially intestine autolyzes rapidly.

#### Shipping Requirements

- Veterinarians should completely fill out the WVDL General Submission Form which includes the **age** of the animal. An electronic copy is available at [www.wvdl.wisc.edu](http://www.wvdl.wisc.edu).
- The laboratory should receive the samples within 24-36 hours.
- Package the samples with enough ice to ensure they remain **cold** during shipment. Clients should schedule shipments to avoid weekend and holiday delivery of samples.
- **WINTER SHIPMENTS:** Please add isopropyl alcohol (1:10 ratio) to the formalin for formalin fixed tissues to prevent freezing during shipment.