



## Clinical Pathology Sample Collection Guidelines

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### General Information:

- For technique training, contact the ULAM Training Core at [ulam-trainingcore@umich.edu](mailto:ulam-trainingcore@umich.edu) or (734) 763-8039.
- For assistance with sample collection, contact ULAM Technical Services at [ulam-techservices@umich.edu](mailto:ulam-techservices@umich.edu).
- For questions about specific chemistry volumes, contact us at (734) 936-3395 or (734) 936-3803.

### Minimum Volumes:

- **CBC (Complete Blood Count):**
  - For small species (rodents), draw **minimum** 50µl whole blood in lavender (EDTA) Microvette 100 tube (If using 250µL tubes draw minimum 125µl)
  - For larger species draw up to the listed draw volume: note that we do not accept tubes >4 ml
  - Other anticoagulants may interfere with results
  - Immediately and thoroughly mix sample after drawing by inverting 8-10 times
  - Keep at room temperature, **NOT** on ice; refrigerate at 4°C if must be stored overnight
  - CBC samples cannot be analyzed after 24 hours
- **Chemistries:**
  - Chemistries are performed on serum or heparinized plasma
  - Blood may be collected in the serum separator microtainer (yellow), plasma tubes (green), or no-additive serum tubes (red top). Serum volume recovery is best in serum separator tubes (yellow).
  - Normally, half the volume of whole blood is serum (i.e. 100 µl whole blood gives 50 µl serum)
  - Allow blood to clot for ~30 minutes, then centrifuge sample for 8-10 minutes at 1000-3000 g
  - If samples will not be run for > 24 hours or more, spin and separate serum, then freeze serum at -20°C.

### Submission Notes:

- A current account number (short code) must always be given
- Syringes with needles, glass sample tubes, or tubes with volumes >4 ml will NOT be accepted
- If running chemistries the only anticoagulant that is acceptable for plasma is lithium heparin (no citrate!)
- Fecal specimens must be in proper containers (no gloves)
- Urine samples should be clean catch in a sterile container
- Microbiology samples should be submitted promptly after collection

### Supplies:

Though the ADL does not provide supplies, we do have a list of sources. Please ensure that you purchase plastic (not glass) tubes of appropriate volume for the species - note we cannot accommodate tube volumes >4 ml.

Item (draw volume)	Usage	Vendor	Catalog #	Mfr	Mfr #
Serum Separator Microtainer	Chemistries, Serology	Fisher	02-675-185	BD	365967
EDTA Microvette 100uL	CBC	Fisher	NC9299309	Sarstedt	20.1278
EDTA Microtainer 250uL	CBC	Fisher	02-669-33	BD	365974
Vacutainer Serum separator tube 3 ml	Chemistries, Serology	Fisher	02-657-27	BD	366668
Vacutainer Serum separator tube 4 ml			02-685-111		367812
Vacutainer K <sub>2</sub> -EDTA tube 3 ml	CBC	Fisher	02-683-99B	BD	367856
Vacutainer K <sub>2</sub> -EDTA tube 4 ml			02-689-4		367844
Culturette collection system	Microbiology swabs	Fisher	B432009x	BD	Varies with media