
Getting to Know Your Stuff

Services, Supplies, and Equipment at AAVEC

Know Your CVRC Neighbors

AAVEC shares a space with several other veterinary specialty services.

→ **Chesapeake Veterinary Surgical Specialists (CVSS)**

Orthopedic and soft-tissue surgery
Rehabilitation

→ **Atlantic Veterinary Internal Medicine & Oncology (AVIM)**

Ultrasound and endoscopy procedures
Intensive and critical care
Chemotherapy

→ **Compass Veterinary Neurology & Imaging (CVNI)**

Manage neurologic conditions, neurosurgery
Advanced imaging (MRI, CT)



Know Your CVRC Neighbors

AAVEC shares a space with several other veterinary specialty services.

→ **Cardiac Care for Pets (CVCA)**

Echocardiograms, Holter monitors, other diagnostics

Full cardiac work-up and blood pressure monitoring

→ **Eye Care for Animals (ECFA)**

Diagnostics and treatment of ophthalmic conditions

Ophthalmic surgery

→ **Veterinary Radiation Oncology of the Chesapeake (VRoC)**

Radiation treatment of pets with cancer

Advanced imaging (MRI, CT)



Common Supplies

Blood Tubes and Supplies

→ Purple Top Tube (LTT)

EDTA additive

Prevents clotting of blood

For CBCs, whole blood tests



→ Red Top/Serum Separator Tube (SST)

Gel matrix

Separates blood cells from serum

For chemistries, chemistry panels, serum tests



→ Blue Top Tube/Citrate Tube

Citrate additive

Prevents clotting of blood

For coagulation tests, hemophilia panels



→ Green Disc (Lithium Heparin Whole Blood Separator)

Lithium heparin additive

Prevents clotting of blood

For chemistries, chemistry panels (0.7ml)



→ White Top Tube (WTT)

No additives

For urinalyses, stone or sample collection



Blood Draw Supplies

→ Syringe with needle

1cc, 3cc, 6cc

"Go-to" for most blood draws

Luer-lock or slip tip allows easy needle change

→ Insulin syringe

Smallest gauge needle

Limited blood amount (1cc reservoir)

Good for BGs, PCVs

→ Butterfly catheter

Gauges: 25, 23, 22, 21, 19

Flexible tubing and winged grip

Good for blood draws or short infusions

→ Alcohol

To wet and flatten hair/fur

Can interfere with some test results (coags, ethylene glycol)

→ Wrap/Bandage

For pressure on venipuncture site after blood draw



IV Catheter Supplies

→ Clippers

Will need to clip fur around limb

→ Scrub and Alcohol

3-4 pieces each of alcohol-soaked gauze and
chlorhexidine scrub-soaked gauze

Will need to prep IVC site

→ Dry gauze

2-3 pieces of dry gauze to dry skin

→ IV catheter

Gauges: 26, 24, 22, 20, 18, 18 long

Get at least two, difference size choices are nice

→ Tape

3 total pieces, with "tabbed" ends

One ½" piece, two 1" pieces

Should be long enough to encircle limb twice

→ Flushed T-set

T-set/T-port will be secured to IVC for easy injections
and fluid administration



Urinary Catheter Supplies

- **+/- Clippers, Scrub and Dry Gauze**
3-4 pieces each of chlorhexidine dry gauze
May need to clip excess hair from or clean prepuce

- **Urinary Catheter**
Choose appropriate size for patient
French Red Rubber

Temporary placement (empty, obtain sample)

Foley

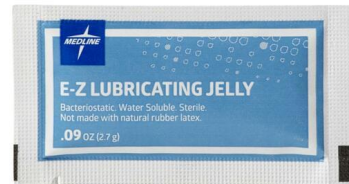
Indwelling/long-term use

→ **Syringe with 3-5ml NaCl** for balloon

- **Sterile Lube / Lidocaine Gel**
Lubricate catheter for insertion
Provide mild topical numbing for comfort

- **Sterile Gloves, Gloves**
Need sterile technique for placement
Extruder may want gloves also

- **Collection Syringe**
Aspirate catheter to obtain sample or empty bladder



Common Equipment

Blood Pressure Equipment

→ Doppler Machine

Ultrasonic detection of arterial blood flow
Obtains systolic blood pressure

→ Sphygmomanometer

"Squeezy thing"
Used to inflate cuff and occlude vessel
Contains dial to read measurement

→ Ultrasound Gel

Used as medium for sound waves

→ Blood Pressure Cuff

Numerous sizes available
Positioning matters!
One side goes against skin
Alignment of tubing with vessel
Replace if leaking or velcro is worn



ECG Machine

→ ECG Machine

ECG = **E**lectro**c**ardiogram
Monitors heart rhythm and activity
Can identify irregularities



→ ECG Leads

Color-coded leads attach to patient
Temporary = alligator clips
Long-term = snap-on
Mnemonics to remember placement



→ ECG Adhesive Pads

Adhere to patient's skin (clip & clean first!)
Can benefit from tiny dab of gel



→ ECG Strip Mounting Paper

When paper strip is recorded
Printed strip can be mounted on adhesive paper
to be put into patient's record



Pulse Oximeter

→ Pulse Oximeter (“Pulse Ox”)

Detects blood-oxygen levels
Measures percentage of hemoglobin that is saturated with oxygen

→ Probes

Clip-on

Attaches to area of thin skin or mucous membrane

Lip, tongue

Toes, ears, inguinal skin

Prepuce, vulva

Rectal

Cover with thermometer sheath and lube

→ Batteries

Most take AA, should be checked and replaced as needed



Capnograph (EMMA)

→ Measures EtCO₂

EtCO₂ = end-tidal carbon dioxide

Provides real-time numbers/results

Valuable in anesthetic procedures and CPR

Ventilation

Cardiac Output

Anesthesia machine issues

Failure of unidirectional flutter valve

Dead space with no gas exchange

Sodalyme efficacy

Results show on LCD screen

→ Connection to Breathing Tubes

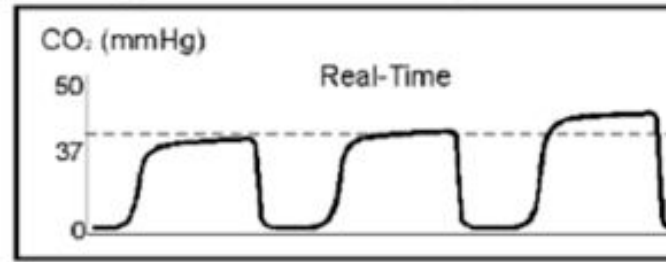
Attaches between patient's endotracheal tube and breathing tubes connected to anesthesia machine

→ Display

Shows CO₂ value (35-45 mmHg = dog normal)

Shows breaths per minute

Shows capnograph wave form



Glucometer

→ **Glucometer**

Measures blood glucose (BG) level
Separate settings for dogs and cats
Rapid results and minimal blood sample

→ **Test Strips**

One-time use
Handle by edges and with clean, dry hands
Insertion of strip turns glucometer on

→ **Calibration and Quality Control**

When starting a new container of test strips
If error message is displayed



Tonometer/TonoPen

→ TonoPen

Measures intraocular pressure (IOP)
Lightweight, handheld
Does require simple calibration
Results show on LCD screen



→ TonoPen tip sleeves

One-time use
Fit snugly around end of TonoPen



→ Tetracaine drops (or Proparacaine*)

Administer prior to obtaining IOP
Numbs the eye

→ TonoVet

Measures intraocular pressure (IOP)
Lightweight, handheld
Does not require using numbing agent
No calibration required
Does require precision positioning
*Distance from eye, *Horizontal/level
Results show on LCD screen



AeroKat/AeroDawg Inhalant Chamber

→ Administer Inhalant Medications

Albuterol - bronchodilator
Flovent - corticosteroid

→ Soft, Non-Stick Mask

Varying sizes to fit patient
Easily cups patient's nose/snout
Well-tolerated by patients

→ Medication Chamber

Designed to work with metered dose inhalers
Holds medication in "spacer" chamber
 Smaller lung capacity of pets
 Slower breathing rate/delayed inhale
Distance helps reduce noise reactivity to spray

→ Flow-Vu Indicator Flap

Easy to count breaths taken
Confirms good mask seal
Ensures proper medication delivery



Warming Equipment

- **Bair Hugger**
Forced air warming
Multiple temperature settings
Reusable blankets
Aggressive warming - monitor temp (q15min)



- **Warm Water Circulating Pads**
Pump warms water that circulates in pad
Use **distilled water** only
Check pads for damage/tears/leaks
Moderate warming - monitor temp q1h



- **Pink Discs**
Microwave to heat gel in plastic disc (a few min)
Stays warm for several hours

- **"Warmies"**
Fluid bags with dye, kept in incubator



CAUTION - AVOID THERMAL INJURY!

Use towel barriers / avoid direct contact

Thanks!