

How to Ease the Pressure

Systolic blood pressure (SBP) measurement guide

TAKING A BLOOD PRESSURE MEASUREMENT

For tips on how you can ease situational hypertension - please see overleaf

Select the site, limb or tail, you would like to apply the cuff to

TOP TIP



Use the limb or tail the cat tolerates most. Remember to record the site measured so the same place can be used at the recheck as there is natural variation in SBP between the different positions

Check the correct cuff size. As a general rule for limb/tail:

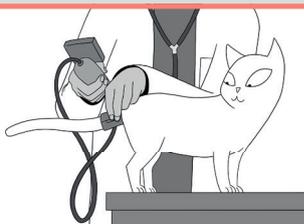
< 7.5cm circumference for **size 2 cuff**

> 7.5cm circumference for **size 3 cuff**

Place the cuff

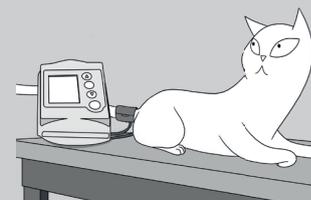
Doppler:

- Use plenty of ultrasound gel – clipping isn't usually necessary
- Use headphones where possible or keep the sound as low as possible
- Position the Doppler probe until the pulse is heard (use gentle pressure to avoid restricting blood flow)
- Gently inflate and deflate the cuff a few times before taking measurements allowing the cat to acclimatise to the sensation
- Slowly inflate the cuff to 20-40 mmHg above the point where no pulse is heard
- Allow air to slowly release from the cuff
- SBP is the point at which the pulse is first heard



High definition oscillometry (HDO):

- The area where the inflation tube enters the cuff should be placed closest to the artery to maximise sensitivity
- The cuff will automatically inflate and deflate to generate readings – only SBP should be used
- Make sure you check the validity of the readings by looking at the graph as the slightest movement can affect the accuracy of the measurement



Discard the first systolic blood pressure (SBP) reading

Take 5-7 consecutive and consistent readings (ideally aim for readings within 15 mmHg) to calculate the mean SBP

TOP TIPS



- If the cat becomes agitated, stop and let the cat settle before continuing rather than using restraint
- Try to keep the cat in the same position throughout and don't measure while the cat is moving
- Headphones are helpful as they give you time and privacy in front of owners to find the pulse

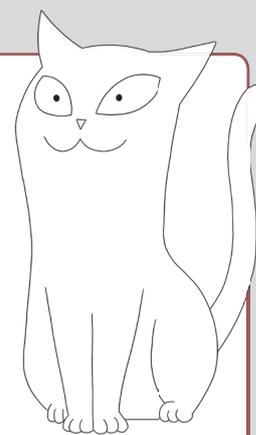
Continue →



Ease situational (white coat) hypertension

Temporary increases in systolic blood pressure (SBP) due to stress and anxiety in the clinical environment can be a problem for getting an accurate SBP reading but there are a few things you can do to help minimise this:

- Use a calm and quiet room, away from other animals
- Allow the cat to explore and acclimatise for 5-10 minutes in the room where you will measure the blood pressure (BP)
- Have minimal people involved (usually needs two, use the owner if possible)
- Use the cats own bedding and use Feliway® to help the cat cope with the new environment
- Allow the cat to adopt its preferred position
- Use minimal and gentle restraint



If a cat is young and/or does not have any target organ damage or an underlying condition (e.g. chronic kidney disease, hyperthyroidism, etc.) that could predispose to systemic hypertension, always make sure you rule out situational hypertension by repeating SBP assessment on 2 or more occasions (one week apart). Situational hypertension does not require treatment.

INTERPRETING RESULTS

Normotensive
< 140 mmHg

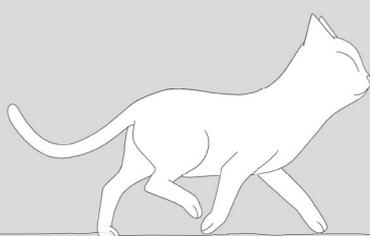
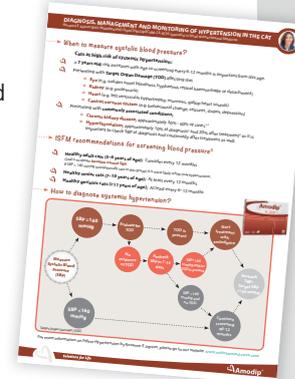
Pre-Hypertensive
140 mmHg - 160 mm Hg

Hypertensive
> 160 mmHg
Severely Hypertensive
≥ 180 mmHg

Re-assess BP in 3-6 months¹

- These cats are close to being hypertensive and as clinical signs of early hypertension can be subtle or absent it is advisable to recheck them in 3-6 months
- This may be situational hypertension so consider helping them relax and acclimatise before their next blood pressure check

Investigate further. For treatment and monitoring advice refer to Rosanne Jepsons protocol



80% of cats who are hypertensive will have an associated, concurrent disease¹

Regular monitoring for predisposing conditions alongside BP is advisable

Measuring blood pressure accurately takes practice but the good news is, the more you measure the easier it becomes!

Complete the Ceva 4-part online Hypertension Ambassador CPD course to learn the who, why and how of blood pressure screening with Sarah Caney – including how to check for target organ damage (TOD)

Visit www.veterinarywebinars.com/feline-hypertension-ambassador/ to find out more