



From time to time the AAFP will respond to emerging new knowledge or issues that are of concern to veterinary professionals caring for cats. Our position statements, which represent the views of the association, are available at: [www.catvets.com/professionals/guidelines/position/](http://www.catvets.com/professionals/guidelines/position/)

## AAFP Position Statement

### Respectful handling of cats to prevent fear and pain

To create pleasant veterinary visits and keep cats calm, the veterinary team must strive to ensure respectful and effective patient handling. This requires an understanding of normal cat behavior, body and facial postures associated with fear in cats, how cats learn, and how to train cats to carriers.

#### Understanding the cat

To create a more comfortable clinic environment for cats, it is important to understand that cats perceive the world through their senses. The cat's sense of smell is far superior to ours, playing an important role in communication, social behavior, sexual activity and food appreciation. The scent of dogs, unfamiliar people, and the marking of another cat – even rubbing – can be frightening and arousing for a cat.

The cat's sense of hearing is approximately four times more sensitive than ours (65 kHz in cats vs 20 kHz in humans), and cats hear higher frequencies than people, including ultrasound. However, they cannot localize sounds very well and, because their sense of hearing is so sensitive, they perceive loud noises when we think we are talking in a normal voice. The noise of other cats, other animals, strange people, and medical equipment such as centrifuges and x-ray machines often startles feline patients.

Cats are also very sensitive to touch and use their whiskers to feel their environment. When aroused, they can be very sensitized, even to gentle petting or stroking.

Cats can see well in dim light, have some color vision, and are very sensitive to movement. Rapid movements, especially if unanticipated, heighten their responses and can lead to a more reactive patient. Usually slow is fast, and fast is slow, when working with cats.

#### Cat communication

Fear is the number one cause of cats 'misbehaving' at the veterinary clinic. Any cat will try to defend itself if it feels threatened; this is normal feline behavior derived from predator avoidance in the wild. Fearful animals usually engage in one of the four F's:

- ❖ **Freeze** The cat freezes, crouching and becoming immobile. This usually occurs at the beginning of the trigger stimulus or when the trigger stimulus is relatively low. It often occurs in cats at the veterinary hospital (Fig 1).
- ❖ **Flight** The cat actively avoids the trigger stimulus; eg, the cat darts into a corner to avoid being picked up.
- ❖ **Fight** The cat exhibits defensive aggression to avoid or back away from a frightening stimulus; eg, if we reach for a cat which is cowering at the back of a cage, the cat may become aggressive because this is the only way to protect itself.
- ❖ **Fiddle or fidget** The cat performs a displacement activity, such as grooming, when faced with a fear-eliciting stimulus.

Recognizing postures associated with fear (see page 570) helps prevent escalation of the fear and possible injury to all involved.

#### How cats learn

If a cat has a painful experience during the first veterinary visit, it will be fearful during subsequent visits. On the other hand, if the cat learns that the carrier, car trip and veterinary visit are associated with treats and other positive experiences, it learns to enjoy these experiences.

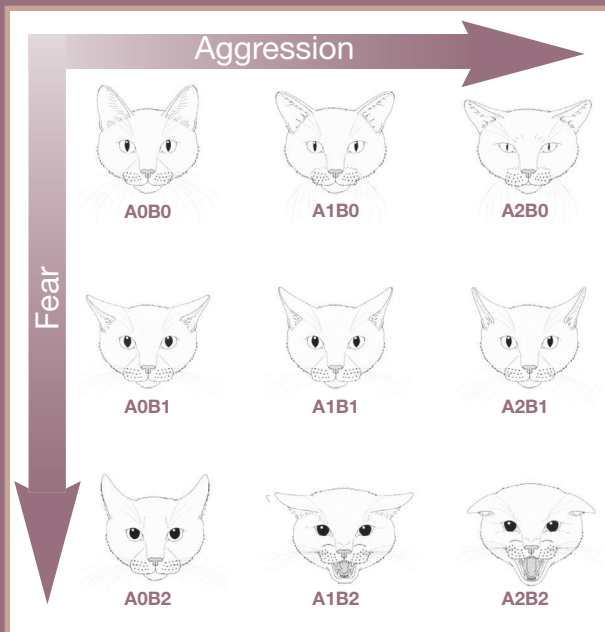
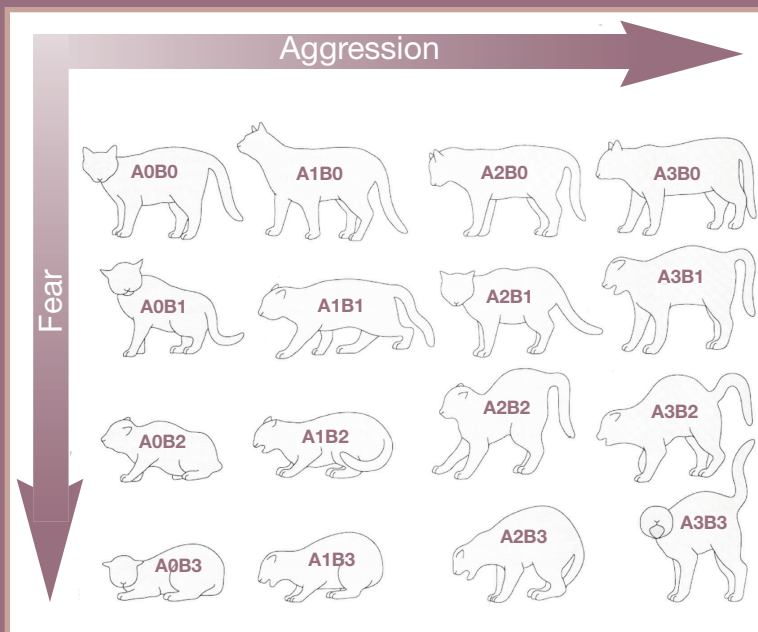
Punishment inhibits learning and increases anxiety. The animal doesn't understand what is wanted or why it's getting punished, and instead may learn to associate pain or fear with the situation, which can escalate to overt aggression.<sup>1</sup>

It is important to teach team members and clients that positive reinforcement for desired behavior is the only effective way to teach a cat, and that undesired behavior should be ignored or redirected to a desirable behavior. Positive reinforcement must be given within 3 seconds of the desired behavior so that the cat doesn't have time to engage in another activity that we may inadvertently reward instead. At the veterinary hospital, the cat should always be rewarded with treats and praise for calm behavior (Fig 2).



**FIG 1** This fearful cat is adopting a freeze position, with widely dilated pupils, ears back, and fur with piloerection. Courtesy of Dr Deb Givin

BODY AND FACIAL POSTURES



In these classic drawings of body postures, as one moves from A0B0 to A3B0 the cat becomes more offensive, while more defensive behavior is exhibited as one moves from A0B0 to A0B3. The basic, calm cat is shown in A0B0. A3B3 represents a cat that is exhibiting both defensive and offensive behaviors. The most aggressive cat in an offensive, assertive sense is the cat in A3B0; this is the cat clients will want to watch in situations involving profound inter-cat aggression or unprovoked aggression to humans.<sup>2</sup>

*Diagrams used with permission, adapted from Leyhausen (1979)<sup>3</sup>*

In these classic drawings of facial postures, as one moves from A0B0 to A2B0 the cat becomes more reactive, while fear and an increased unwillingness to interact is more pronounced as one moves from A0B0 to A0B2. The diagonal from A0B0 to A2B2 represents a cat that is becoming more offensive and assertive. More offensive postures are characterized by postures above the diagonal, whereas more defensive behaviors are characterized by the postures below the diagonal. The basic, calm cat is shown in A0B0.<sup>2</sup> *Diagrams used with permission, adapted from Leyhausen (1979)<sup>3</sup>*

Because anxiety can inhibit learning, cats with a history of being anxious at the veterinary hospital may require anxiolytic (anti-anxiety) medication. The anxiolytic should be short-acting,



**FIG 2** Some cats prefer to be examined on the floor. Treats or catnip may be offered as positive reinforcement for calm behavior. *Courtesy of Dr Ilona Rodan*

with a rapid onset of action, and be able to both abort and prevent anxiety or distress associated with veterinary visits. Anxiolytics work well in conjunction with food treats and other rewards. They can be used concurrently with tricyclic antidepressants or serotonin selective reuptake inhibitors. Tranquilizers have been used prior to veterinary visits; they do not relieve anxiety, and may disinhibit aggression (making the cat more aggressive).

The sensitive period of socialization is the age range during which particular events are especially likely to have long-term effects on the individual's development. The sensitive period in kittens is from 2–9 weeks of age. Kittens that have positive handling experiences during this period are more resistant to stress, display less fear, and are capable of learning certain tasks faster than cats that are not handled.<sup>4</sup> Early enrichment and exposure to a wide variety of stimuli, including all stimuli the cat might be expected to encounter during its lifetime (eg, car travel, veterinary visits, children or dogs) prevents long-term fear.

Encourage clients to expose the kitten to positive experiences and people of different ages and gender, under calm conditions and by using positive reinforcement (eg, treats, toys, massage, praise, etc).

Although easiest to teach kittens during the sensitive period of socialization, older kittens and cats of any age can still acclimate or adapt to new things – it just may take more time and experiences.<sup>5</sup>

**First veterinary visits and kitten classes**

First veterinary visits allow us to set the kitten or cat up for success. If first veterinary visits are pleasant, the kitten or cat is more likely to have future positive experiences at the veterinary hospital and clients are more willing to bring the cat back for routine health care. Teach cat owners early on about positive exposure to maintenance procedures – nail trimming, combing, ear manipulations, teeth brushing and veterinary visits – to lessen the adverse impact of such stimuli during veterinary visits and home care. Encourage clients to bring their kittens in between appointments for weight checks, increased socialization and fun visits, especially during the first year of life.

Kitten classes are an excellent way to teach owners how to understand cats and their needs, allow time for the family to learn how to handle kittens for different procedures that can be done at home, and allow kittens to socialize with other kittens.

**Getting the cat to the veterinary hospital**

Clients should be taught to make the carrier a haven by keeping the carrier out in an easily accessible location. A comfortable blanket or familiar clothing from a favorite person placed in the carrier (Fig 3), plus treats or toys, will entice the cat to enter on its own. Rewards with treats, food and calm praise will positively reinforce the cat’s association with the carrier. Once the cat is regularly going into the carrier and uses it for resting, encourage the owners to take their cat on periodic car rides paired with positive experiences. Bringing toys, blankets, treats and comb (if the cat enjoys grooming) helps make the trip more familiar. The travel should be on an empty stomach to prevent motion sickness. This also increases interest in treats during the car ride and at the veterinary hospital, allowing for a more positive experience. A synthetic feline pheromone that has a calming effect on the cat can be sprayed in the carrier 30 minutes before travel.<sup>6</sup> Draping a blanket over the carrier also helps prevent motion sickness.



**FIG 3** Make the carrier a safe haven. This cat is resting on a fleece sweatshirt of a favorite person. Courtesy of Dr Ilona Rodan

Carriers that provide the option of loading from the top as well as from the front make it easier to get the cat in and out in a non-stressful manner (Fig 4). The ideal carrier also allows the top half of the carrier to be removed so that a more timid cat can remain in the bottom half of the carrier during the veterinary examination. Additionally, these hard-sided carriers can be easily secured with seat belts (soft-sided carriers should be secured in a similar manner).

**The feline-friendly veterinary hospital**

**General recommendations**

Whether a companion animal hospital or an exclusively feline hospital, there are steps that can be taken to keep feline patients more comfortable and calm. Educate staff members about the nature of the cat, how it responds in strange environments, and how to respectfully handle the cat. Speak calmly in soft tones around the cat.

A synthetic feline pheromone found to calm cats in stressful environments should be placed throughout the clinic. Pheromone diffusers are best for rooms, including each exam room, reception and treatment areas, and hospital and boarding wards. The spray is used in carriers and cages, and on towels. It may also help to use the spray on clothing and hands.

Reward all positive or desired behavior. Never use punishment, and teach clients never to use punishment – it doesn’t teach what we want the patient to do, and will increase fear, the underlying cause of the ‘misbehaving’ and aggression at the veterinary hospital. Anxious or irritable behavior should be ignored or distracted with toys, catnip or treats; this behavior should not be reinforced or punished.

**A calm reception area**

Whenever possible, answer telephones away from the front desk, and speak in soft voices to make the reception area a quieter environment. White noise machines, soft music (eg, classical), fountains or fish tanks are also calming in the reception area. If possible, have a separate cat waiting room and/or offer cat-only appointment times to eliminate or reduce barking and dog activity.

No matter how calm the reception area is, it is best to take the cat directly to an examination room to prevent fear being induced by strange people and animals. If this is not possible, have perches or higher places in the reception area so that cats don’t need to face dogs or other cats.

**The exam room and examination**

Once in the exam room, allow the cat to initiate contact (cats are less apprehensive if they have some control over their environment). Open the carrier door and allow the cat to sniff or explore the room while greeting the client and reviewing the history. Catnip or treats can also be put near the carrier to entice the cat to venture out of its own volition. If the cat still does not approach, an index finger extended towards the cat allows it to smell and hopefully rub against the finger, since cats like to rub against protruding objects.



**FIG 4** This carrier opens both on top and in front (as does the carrier in Fig 3). The top half of the carrier may be removed so that the cat can be examined in the bottom half. Courtesy of Dr Ilona Rodan



**FIG 5** If the cat doesn't want come out of the carrier on its own, removing the top half of the carrier allows the cat to remain in the bottom half for as much of the exam as possible. *Courtesy of Dr Ilona Rodan*

In addition to hygiene reasons, all staff members should wash hands between patients to eliminate unpleasant odors. While obtaining the history, the patient can also be assessed from a distance to evaluate respiratory pattern, gait, and the fear level of the patient by monitoring posturing and facial expressions, and the response to treats; avoid making direct eye contact – a threat to the cat if by an unknown person.

If the cat won't leave the carrier, take the top half of the carrier off, if possible, so that the cat can remain in the bottom half for as much of the exam as possible (Fig 5); dumping the cat out of the carrier can be very frightening for the cat. If the cat is still fearful, slowly slide a towel between the two halves of the carrier as the top is taken off. This provides a safe hiding place for the cat and allows you to wrap the towel around (ie, 'burrito wrap') the cat if needed (Fig 6). Towering over a cat from above or grabbing at it in a carrier or cage can be frightening and should be avoided.

The best place to examine the cat is where the cat wants to be. Many cats do not like exam tables because they are punished for climbing on tables at home. Having perches or shelves, benches, and a small pet scale give cats good options to choose from. Many cats prefer being examined on the blanket or padding from



**FIG 6** The burrito wrap often makes cats feel more secure and prevents scratching of those working with the patient. The best handler should educate staff during staff meetings and new employee training. *Courtesy of Dr Ilona Rodan*

the carrier, which already has the cat's scent, next to the client or on the floor or a lap. Cats that like sitting on laps are often comfortable in your lap, but facing away from you and towards the family member. If the exam table needs to be used for the exam, and when collecting lab samples, the exam table should be covered with a fleece, towel or other soft material for the cat.

Use the minimal amount of restraint needed. Many of us have been taught to scruff cats. Cats will usually cooperate better if allowed to be in a position or positions that keep them more comfortable. Many cats like to be massaged on their head, behind the ears or under the chin. This is excellent both to distract and calm the cat. Using your three middle fingers to slowly massage or stroke the head, and using the other fingers to control the



**FIG 7** Gently holding the head in place while massaging the head helps calm feline patients. The blood pressure of this cat is being checked at the same time. *Courtesy of Dr Ilona Rodan*

**FIG 8** Instead of stretching out the cat, hold its legs in a comfortable position, while gently supporting the feet with the fingers. *Courtesy of Dr Ilona Rodan*



cat's head on each side, helps protect you and the cat (Fig 7). Do not stretch out the cat, but instead hold it in a relaxed manner, without pulling the feet (Fig 8). Also avoid looming over the cat or grabbing for the cat. Cats often feel more secure when leaning against your arm or body.

Distract anxious cats by engaging them in an alternative behavior that is incompatible with the fearful or anxious behavior, such as playing with an interactive toy, following a laser pointer, eating treats or rubbing on catnip. Gently petting the cat behind the ears or rubbing under the chin can also divert attention away from procedures being performed. Clients should be educated to remain calm, a measure that will help to keep the cat calmer.

There are also many towel handling techniques that can be used to successfully examine both fearful and fearfully aggressive cats, and to collect lab samples.<sup>7</sup> In addition to the 'burrito wrap', other common towel techniques are covering the head with a towel to eliminate visual cues, moving a towel from one side to another to examine the different parts of the cat, and gently placing a towel around the ventral neck and one front leg in order to place an intravenous catheter into or collect blood from the cephalic vein (Fig 9).

If easier on the patient, the exam does not need to be done in sequence from head to tail. In fact, it is best to do the least offensive parts of the exam first and examine areas that cats don't like touched last (for some, it is examining the teeth, others the legs). Avoid prolonged (more than 2 seconds) or repeated fighting or struggling.<sup>7</sup> If the cat struggles, change the position, use toweling, or chemical restraint if needed. Always use analgesia if the cat is painful or painful procedures need to be performed. Senior patients commonly have arthritis, and can be especially painful. For a list of painful conditions and painful procedures, see the AAHA/AAFP Pain Management Guidelines at [www.catvets.com](http://www.catvets.com).

#### Lab sample collection

Lab samples can usually be collected from cats with minimal patient handling. Make sure the patient is comfortable for sample collection by allowing it to remain in the most natural position possible, and without stretching or holding the legs tightly. Have a blanket or something soft for the cat to lie on, preferably one that smells like home. Older, arthritic and underweight cats are especially uncomfortable on cold and hard surfaces, and need nice soft padding underneath them. Cats can also be gently wrapped in a towel to help them feel more secure. Many cats, especially kittens, can be distracted during the collection by giving them canned food or treats.

When blood pressure measurement is indicated, it should be done prior to other diagnostic tests, keeping the patient as relaxed and calm as possible to avoid white coat hypertension. The blood pressure is usually best measured in the exam room instead of taking the patient to the treatment area for the procedure; this is because it takes approximately 5–10 minutes for the cat to acclimate and for the blood pressure to return to normal (obtaining the history and performing the examination will take 10 or more minutes).<sup>8,9</sup> Blood pressure measurement should be performed in a quiet environment, away from other animals and generally with the owner present.<sup>8</sup> The cat should be placed in a comfortable position, without stretching out the legs. Measuring blood pressure while the cat is in a lap or carrier, or while on the floor, can help to prevent white coat hypertension. Blood pressure measurements can be taken from either front (antebrachium) or back (hock) legs or one inch from the base of the tail (the artery is ventral) (Fig 10). The leg should not be pulled out; instead, putting



**FIG 9** This towel technique provides comfort for the cat and is a safe method of handling for venipuncture or catheter placement. Courtesy of Dr Sophia Yin<sup>6</sup>

a hand gently behind the leg (eg, elbow) prevents the cat from pulling the leg back and keeps the cat comfortable. Headphones are important to prevent fear associated with monitor noise. Warmed gel prevents the startle seen with cold gel.

Many clients prefer to watch while samples (including venipuncture and cystocentesis samples) are collected, instead of worrying about what's happening to their cat 'in the back'. It is also a great educational experience for them and leads to more value for our services. So that the smallest blood sample can be taken, check with your lab how much blood is really needed for the samples. Usually 2–3 cc blood is sufficient for a complete blood count, chemistry profile and total thyroxine. To prevent dilution of EDTA tubes, ask your lab for 'microtainer' or avian EDTA tubes. Regardless of where the blood sample is collected from, almost all patients only need one person to hold them for



**FIG 10** Blood pressure measurements from the tail vein work well in arthritic cats and those that don't like their feet being handled. Note that the client is distracting the cat with grooming, one of his favorite things. Courtesy of Dr Ilona Rodan