

Training a cat to accept an inhaler

Feline asthma can be successfully treated with medication delivered through an inhaler. However, some cats are not comfortable with the inhaler and the distress caused by using it can have a negative impact on the owner–cat relationship and even lead the owner to avoid using the inhaler with their cat. However, with careful introduction and positive reinforcement training, its use can be well tolerated by a cat. The veterinary nurse is in the ideal position to offer this training and support. After introducing the inhaler to the owner and explaining why it is needed and how it works, it is important to ensure the owner understands how cats learn and how their learning can be influenced in a positive way. Through this understanding, owners will be more receptive to undertaking the steps needed at home to train their cat for successful use.

Contrary to popular belief, cats can be trained. For training to be effective we must understand how cats learn. Cats are learning all the time, regardless of whether they are intentionally being taught something or just going about their daily lives. As an animal learns, it is developing negative or positive associations with the various things it encounters and interacts with. For example, it learns that certain things predict other things. It therefore associates two things together in its mind. These things can be sights, smells,

Key point

To be effective, training needs to ensure that the cat has positive associations with the inhaler. A slow, gentle step-by-step approach is required.



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sounds, touch or a combination. And they can be good or bad. In order to associate that one thing predicts another, they need to occur one after the other very close in time. For example, if a cat is fearful of the hissing sound the inhaler makes when it is depressed, it will begin to associate this sound with the sight of the inhaler as every time it sees the inhaler, it learns the hissing sound comes soon after. Thus, the cat soon starts to show fearful behaviour of the inhaler, even before the hissing sound comes. Repetition tends to consolidate such behaviour. However, it can sometimes take just one negative experience for a cat to

What is a positive consequence for a cat?

So, what exactly is a positive consequence for a cat? It is really important for the owner to think about what their specific cat enjoys. Food is going to be most useful in training and therefore an owner should spend a bit of time identifying what their cat likes best of all. For example, this may be a commercial cat treat, a smear of meat paste, a chunk of their wet food or a small piece of prawn or chicken. Training when a cat is hungry can also increase the value of the food rewards and motivate the cat to interact to achieve the food treats. Some cats also enjoy gentle stroking or scratches under the chin and some enjoy play, such as with a wand toy or chasing a ping pong ball; however, the latter may be difficult to incorporate into the later stages of inhaler training where the cat is required to stay still. In training terms, the positive consequences we give the cat (eg, food) are known as reinforcers as they reinforce the preceding behaviour.

In training, it is also very useful to associate the reinforcer with a marker word. By pairing the marker word, for example 'good' with a reinforcer over several repetitions (ie, say 'good' offer treat and repeat), the cat learns that the word 'good' means the reinforcer is on its way. This is beneficial in training as sometimes it is not possible to give the reinforcer at the exact time we wish to. For example, imagine the scenario where a cat approaches and sniffs a space chamber that has been placed on the



Figure 1: Give the cat a positive consequence at the point of the desired behaviour, such as approaching the inhaler

floor (Figure 1). This is a desired behaviour that needs reinforcing with a positive consequence and so the owner calls the cat over to offer it a treat. What has actually happened, is the behaviour of walking away from the space chamber towards the owner led to the positive consequence of the food treat, not the approach and investigation of the space chamber. Thus, using a marker word, allows precise 'marking' or pin-pointing of the desired behaviour — letting the cat know exactly which behaviour caused the positive consequence.

Use of a marker in action

In the iCatCare video entitled 'Helping your cat accept having its mouth checked', the marker is the sound of a clicker rather than a word, but the principle is exactly the same. View it at: <https://bit.ly/2WnmdOS>

learn to fear or become anxious of something. It is therefore much better to introduce the inhaler in a gradual fashion so that all the initial experiences are positive. Undoing a negative association can be difficult and time-consuming in comparison to teaching a positive association.

Cats can also learn from the consequences of their behaviour. When a cat behaves in a certain way, there is generally always a consequence. Whether the cat performs the behaviour it performed again, depends very much on how the consequence made them feel.

For example, if an inhaler was placed on the floor and the cat chose to approach it and sniff it and the owner immediately gave the cat a food treat it liked, the cat would be likely to approach and sniff the inhaler again — this behaviour led to a positive consequence. However, if the cat approached and sniffed the inhaler and the owner thought ‘ah brilliant, he is interested, now is the time to use it’ and subsequently picked it up and held it forcibly against the cat’s face, the cat would be highly unlikely to voluntarily approach the inhaler again. In fact, he may actively avoid it as the consequences of having it placed forcibly against his face (restraint and loss of control) were both perceived negatively. As with everything feline, calmness and patience are key. Thus, the owner’s role is to ensure positive associations are made with the inhaler and interacting with it in the required manner leads to positive consequences as perceived by the cat (see box ‘What is a positive consequence for a cat’).

Why do some cats find the use of an inhaler distressing?

It is much easier to create positive associations than to overcome negative associations. Thus, the various components of using an inhaler need to be broken down into individual parts and introduced separately and positively (Figure 2). Only once accepted separately, should they be brought together. Doing this also helps you to develop a training plan with the client.

A training plan should identify all the various elements of inhaler use that a cat may not feel comfortable with. These are:

- Having something new (the inhaler) in the home — for a few cats, even this will make them wary.

- Being restrained in order to administer inhaler.
- The cat’s muzzle needs to be inserted into a small mask.
- The cat needs to remain still for several seconds (time it takes for 5–6 breaths) with the mask on its muzzle.
- Attached between the mask and the inhaler is a spacer chamber which makes the device large in size in comparison to the cat’s face.
- Depressing the inhaler will create a hissing sound, which cats are likely to find startling and possibly aversive.
- Wiping the face of the cat once the mask is removed with a slightly damp cloth (to remove any traces of medication, which can sometimes cause a rash on the cat’s face).



Figure 2: Introducing the cat to the face mask. Note the cat pushes its face into the mask rather than the mask being pushed towards its face

A training plan should also identify which order things should be trained in for a particular cat. While some things need to be trained sequentially (ie, voluntarily placing of the muzzle into the mask should be fully established before moving on to building duration of this behaviour), other behaviours could be trained simultaneously, although within different training sessions, for example, being calm around the sight and sound of the inhaler.

How to...

Training steps to accepting an inhaler

1 Acclimatising the cat to the individual sights and sounds of the inhaler

The very first steps are to acclimatise the cat to the sight, smell and sound of the inhaler in the home. Depending on the temperament of the cat and how anxious it is generally of new things, an owner may be better separating the inhaler into its separate parts (mask, space chamber and inhaler) and introduce these separately. Introduction is as simple as placing it on the floor and allowing the cat to voluntarily investigate it. Since the inhaler will have come from the vets and likely to smell of the clinic, it is a good idea to have it in the home (out of sight of the cat) for a few days to let it lose some of its clinic smell. Additionally, it can be rubbed over with a cloth or glove that the cat has been stroked with (providing the cat enjoys this) so that it smells more familiar to the cat (Figure 3). The parts should not be presented to the cat, but simply placed near it, allowing the cat to choose when to investigate. Control and choice are critical for a cat to feel comfortable. When the cat does investigate them, the behaviour should be positively reinforced (eg, a food treat offered or the cat stroked). Using a marker word can greatly help with the timing of the positive reinforcement.

Once the cat is fully comfortable with the sight and smell of the individual parts of the inhaler, they can be pieced together and further investigation rewarded. If the cat ignores the inhaler after initial investigation but seems in no way wary of it, we can encourage further investigation by placing treats near or on the inhaler (Figure 4).

Separately to this, the cat can be

trained to accept the sound the inhaler makes when depressed. We obviously do not want to waste medication so a pressurised air duster can that makes a similar hissing sound is ideal. To begin with, the sound can be muffled by placing a towel over the can when depressed, at a distance from the cat. Every hiss sound should be quickly followed with a reward and should always occur at a volume that the cat can cope with. The cat should never feel anxious or worried by the sound. The cat will soon learn that the hiss sound predicts something positive.

2 Ensure the cat is comfortable with gentle restraint

A cat should not be held against its will while an inhaler is being administered but gentle restraint holding the cat may help keep the cat



Figure 3: Transferring the cat's scent on to the inhaler using a glove



Figure 4: Placing a treat near the inhaler will encourage investigation of the device

still and calm without preventing the cat from removing its head from the mask if it feels it needs to. Having the cat sitting, facing away from its owner with their hand gently placed around its chest may be the easiest position. For some cats, being on the owner's lap may be the most comfortable (Figure 5). Gentle restraint should only last a second or two initially, marker word said and the cat offered a reinforcer, and built up gradually to the time needed to administer the inhaler.

3 Training voluntary positioning of the muzzle in the mask

The ideal situation is that the cat voluntarily places its muzzle into the mask and holds it there. Bringing the mask towards the cat and pushing it onto the muzzle should be avoided at all costs. Training success is met when the cat is reaching its head forward to get its muzzle into the mask at each offering of the mask. We can learn a lot from muzzle training in dogs (using positive reinforcement) to learn how to do this — of course adapted to cat's needs. (See the YouTube video entitled 'Teaching a dog to wear a muzzle' for an introduction.) In short, the sight of the mask in an owner's hand should be associated with a reward so the owner brings the mask out from behind their back so the cat can see it and rewards their calm behaviour. This is repeated until the cat is showing signs of anticipating the reward on the sight of the mask.

The next stage is to encourage the cat to voluntarily place its muzzle into the mask. Some cats may voluntarily place their muzzle into the mask as they investigate it. Others may need some encouragement in the form of a food lure placed inside the mask. Allow the cat to eat the treat within the mask. You can use a solid treat or a paste smeared into the mask. Keep

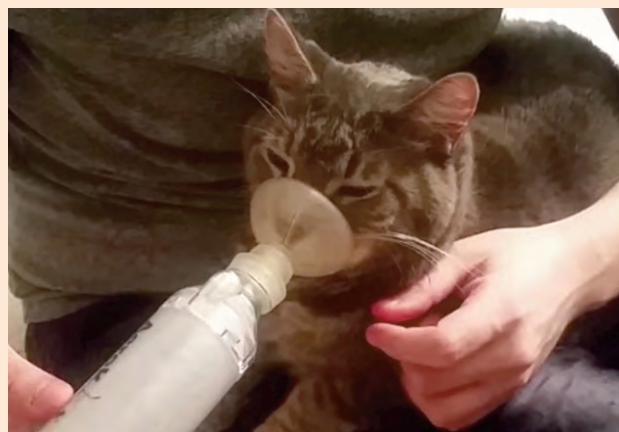


Figure 5: Owner giving a cat its inhaler using minimal restraint

Cat handling videos

iCatCare's cat handling video series illustrates cat friendly handling and training for gentle restraint. See: <https://icatcare.org/advice/cat-handling-videos>

the mask still, never move it towards the cat's face. This always gives the cat choice. The idea is that whenever the mask is presented, the cat chooses to place its muzzle into the mask.

After lots of repetitions, the cat should do this even without a treat in the mask. Of course, once the muzzle is in the mask, a marker word should be given and a treat delivered. In order to build up the amount of time the cat is comfortable with its muzzle in the mask, delivery of the treat needs to take more time and occur in the mask. This could be achieved by using a paste-like treat delivered in a syringe through the end of the mask that the cat can lick off the end of the syringe. Always remove before the cat pulls back out of the mask. You can even move the mask gradually away from the cat to encourage the cat to push its face forward and keep it in the mask.

How to...

4 Bringing it all together

Once the cat is comfortable with placing its face into the mask for the required length of time, the spacer and inhaler can be added to the mask. At this stage, it won't be possible to deliver the treat straight into the mask, so get the cat accustomed to placing its muzzle in the mask for the required length of time and then releasing when it hears the marker word for a food treat delivered out of the mask. Next, it is time to introduce the depression of the inhaler and the combination of the sound and the muzzle in mask together. Ensure rewards are plentiful and of really high value.

Key point

If at any time the cat appears wary during training, it is always advisable to stop, take a break and go back a step in the next session.



Providing ongoing support

Owner success is going to be greatly influenced by how much support they have throughout the training process. Talking it through face-to-face in the clinic and ensuring the owner has plenty of resources to refer to at home will greatly help. Hand-outs with step-by-step photographs and access to training videos are really useful resources. Quite often, owners rush through the training steps too fast or miss out vital training steps and that causes disengagement from the cat. Being on hand for telephone/email support throughout the process will help prevent owners giving up on the training process.

Further reading and resources

- Bradshaw JWS and Ellis S. The trainable cat. A practical guide to making life happier for you and your cat, Aleen Lane, UK, 2015.
- **Cat handling video: administering oral products to cats**
<https://www.youtube.com/watch?v=JxRY59U6Lt0&feature=youtu.be>
- **Asthma in cats.**
<https://icatcare.org/advice/cat-health/asthma-cats>
- **Using an inhaler to treat feline asthma.**
<https://icatcare.org/advice/cat-health/using-inhaler-treat-feline-asthma-0>
- **Teaching a dog to wear a muzzle (muzzle training).**
<https://www.youtube.com/watch?v=1FABgZTFvHo>
- **Cat handling video: recognising and responding to signs of a happy cat.**
<https://www.youtube.com/watch?v=KSXjLgTUbzA&feature=youtu.be>

international cat care

Cat handling videos

International Cat Care, in partnership with Ceva, has developed a set of 16 cat handling videos for vets and nurses. The videos detail best practice handling techniques and approaches, and are designed to reduce stress for cats and improve safety in veterinary clinics.

The videos can be accessed via icatcare.org or through the iCatCare YouTube channel www.youtube.com/user/iCatCare

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The FELIWAY logo, featuring a white cat silhouette and the word 'FELIWAY' in white capital letters on a dark blue rectangular background.