

# A Guide To Cat Asthma



## **Table of Contents**

Chapter 1 - What Is Cat Asthma?	4
What Is Cat Asthma?	5
What Causes Cat Asthma?	6
Signs & Symptoms Of Cat Asthma	7
Cat Asthma Attack Symptoms	8
When To Take Your Cat To A Vet	9
Chapter 2 - How Is Cat Asthma Treated?	10
How Is Cat Asthma Diagnosed?	11
Treating Asthma In Cats	12
Medications For Treating Cat Asthma	12
Other Methods For Treating Cat Asthma	16
Chapter 3 - Side Effects Of Systemic Medications	18
Side Effects Of Systemic Corticosteroids In Cats	19
Short Term Effects	20
Long Term Effects	20
Can Cats Be On Oral Or Injected Steroid Medications Long-Term?	21
Why Inhaled Steroids Are Considered Safe And Effective	22
Side Effects Of Systemic Bronchodilators In Cats	24
Why Inhaled Bronchodilators Are Considered Safe & Effective	25

Chapter 4 - How To Give Your Cat An Inhaler	26
Delivering Asthma Medication To Cats	27
What You Should Look For In A Spacer Device	28
The AeroKat* Difference	29
How To Give An Asthma Inhaler To Your Cat	30
Before Administering The Inhaler	30
Steps For Giving The Inhaler To Your Cat	32
Help Your Asthmatic Cat Live A Happy & Healthy Life	33
Cat Respiratory Symptom Tracker	34

## - Chapter 1 -

## **What Is Cat Asthma?**

Can cats get asthma?

The answer is yes, and it's more common than you may think:
cat asthma affects between 1% to 5% of cats.¹ The condition
can range from mild to life-threatening, so it is important to
know the symptoms and get your cat checked out right away if
you suspect they might have asthma.

 <sup>&</sup>quot;Feline Asthma: What You Need To Know." Cornell University College of Veterinary Medicine. July 20, 2014. Accessed June 03, 2019. https://www.vet.cornell.edu/departments-centers-and-institutes/cornell-feline-health-center/health-information/feline-health-topics/feline-asthma-what-you-need-know.



#### What Is Cat Asthma?

Cat asthma, or feline asthma, is very similar to asthma in humans—it is chronic inflammation of the airways in the lungs. Like in humans, asthma attacks in cats are often triggered by allergens or even stress.

When cats with asthma breathe in allergens, it triggers an immune response that causes inflammation which results in irritation, swelling, and muscular constriction of the airways. This response leads to mucus accumulation and narrowing of the airways, making it hard for oxygen to reach the lungs. Once this response occurs, it makes it very difficult for the cat to breathe.

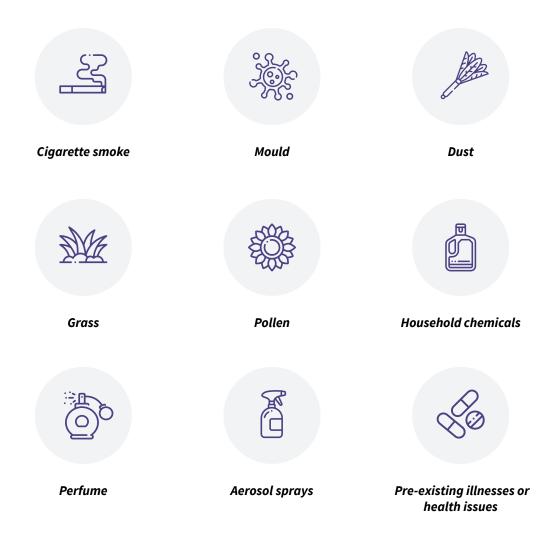
Feline asthma affects between 1% to 5% of all cats.

<sup>2. &</sup>quot;Asthma Symptoms in Cats." WebMD. Accessed June 03, 2019. https://pets.webmd.com/cats/asthma-symptoms-cats#1.

#### **What Causes Cat Asthma?**

Cat asthma itself doesn't have a specific cause; both genders and all breeds of cats are susceptible. Interestingly, Siamese and Himalayan breeds have higher rates.<sup>3</sup>

However, if your cat has asthma, there are a number of triggers that could be causing attacks.<sup>4</sup> Common triggers include:



In most cases, your cat will start showing symptoms within minutes of exposure to the trigger.

<sup>3. &</sup>quot;Caring for a Cat with Asthma | Feline Asthma." Blue Cross. Accessed June 03, 2019. https://www.bluecross.org.uk/pet-advice/caring-cat-asthma.

<sup>4. &</sup>quot;Asthma Symptoms in Cats." WebMD. Accessed June 03, 2019. https://pets.webmd.com/cats/asthma-symptoms-cats#1.



## **Signs & Symptoms Of Cat Asthma**

There are a number of symptoms that are indicative of cat asthma, ranging from mild to severe. Your cat may show one or several of the following symptoms:

#### 1. Heavy/rapid breathing

The normal rate of breathing for cats is about 25-30 breaths per minute at rest.<sup>5</sup> If you notice your cat is taking more than 40 breaths per minute (when not playing or excited),<sup>6</sup> it may be an indication of asthma.

#### 2. Fatigue/lethargy

You may notice your cat is lethargic after playing or is breathing heavier than usual after playtime. Lethargy in cats is a possible sign of low oxygen in the blood, which can result from constricted or swollen air passages.

#### 3. Breathing through the mouth

You may notice your cat is breathing through their mouth or panting.

<sup>5. &</sup>quot;Feline Asthma: What You Need To Know." Cornell University College of Veterinary Medicine. July 20, 2014. Accessed June 03, 2019. https://www.vet.cornell.edu/departments-centers-and-institutes/cornell-feline-health-center/health-information/feline-health-topics/feline-asthma-what-you-need-know.

<sup>6.</sup> Ibid.

#### **ASTHMA ATTACK SYMPTOMS**

In the event of an asthma attack, the following symptoms<sup>7</sup> may be present:

#### 1. Squatting position with neck extended

In an effort to get as much air as possible during an asthma attack, your cat may take a position with their neck extended upwards and their body low to the ground.

#### 2. Blue lips and gums

When oxygen can't make its way to the lungs, red blood cells can't transport enough oxygen to the rest of the body. As a result, you may notice your cat's lips and/or gum start to turn blue.

#### 3. Wheezing

Your cat may be wheezing if they are having difficulty breathing. A wheeze is a whistling or rattling sound made when it is difficult for air to make its way through the air passageways. This is usually a sign the passageways are swollen and/or constricted.

#### 4. Coughing/hacking

During an asthma attack, your cat may be coughing or hacking. A coughing cat sounds a bit different than a coughing human—it will sound like your cat is trying to pass a hairball.



<sup>7. &</sup>quot;Caring for a Cat with Asthma | Feline Asthma." Blue Cross. Accessed June 03, 2019. https://www.bluecross.org.uk/pet-advice/caring-cat-asthma.

#### When To Take Your Cat To A Vet

If you suspect your cat may have asthma, it is best to err on the side of caution. Take them to the vet right away before the condition worsens. If your cat is coughing or wheezing, it may be indicative of a serious health issue and should be treated immediately.

In the event of a feline asthma attack:

- Remain calm. Your cat may become more stressed if they sense panic
- Administer bronchodilator or medication (if prescribed)
- Move your cat to a cool, well-ventilated area
- Take your cat to the vet

Being aware of the signs and symptoms is the first step in ensuring your cat's safety.

Does Your Cat Have Asthma?

Take the **Feline Asthma Assessment** to find out.

## - Chapter 2 -

## How Is Cat Asthma Treated?

The good news about cat asthma is that it can be managed, provided your cat gets the right medications. Once your cat is diagnosed, there are several options to consider.



## **How Is Cat Asthma Diagnosed?**

Chest x-rays, listening to breaths with a stethoscope, and collecting samples are methods the vet will use to determine if asthma is the cause of your cat's symptoms.

However, cat asthma is usually only diagnosed when other conditions are ruled out. Some conditions that may have similar symptoms include:

• Feline Heartworm

Lungworm

Respiratory Infections

Foreign Bodies

The vet may administer special tests to see if any of these conditions are the cause of the symptoms. Taking a video of your cat coughing can help your vet determine if asthma is the cause.

Take the **Feline Asthma Assessment** to see if your cat could have asthma.

<sup>8.</sup> Paul, Mike, Dr. "5 Tricky Conditions You Might Think Are Hairballs." Pet Health Network. April 19, 2016. Accessed June 03, 2019. http://www.pethealthnetwork.com/cat-health/cat-diseases-conditions-a-z/5-tricky-conditions-you-might-think-are-hairballs.

### **Treating Asthma In Cats**

There are several different types of treatment for cat asthma, including medications and modifying your cat's environment to reduce the likelihood of asthma attacks from occurring.

#### **Medications For Treating Cat Asthma**

Treatment options your vet may prescribe include:

#### **Corticosteroids**

Corticosteroids, also known as glucocorticoids, are the primary medication prescribed to treat feline asthma. This type of medication helps reduce inflammation in the airways and is available in oral, inhaled, and injectable forms. During an initial visit to the vet for a suspected asthma attack, cats may be temporarily put on oral corticosteroids while in the diagnosis phase before switching to inhaled options for long term disease control.

Just like in human children with asthma, inhaled corticosteroids are preferred because they target the airways directly. Inhaled medication uses smaller amounts of the drug and does not cause the same systemic side effects as oral or injectable steroids.

Inhaled steroids target the airways directly. Systemic steroids need to be processed by the body before reaching the intended target (the lungs).

The **AeroKat\*** aerosol chamber allows cats to easily use the same metered dose inhalers (MDI) just like humans. This specially designed aerosol chamber for cats captures and holds the medication to help the cat breathe in the dose.

<sup>9. &</sup>quot;Feline Asthma: What You Need To Know." Cornell University College of Veterinary Medicine. July 20, 2014. Accessed June 03, 2019. https://www.vet.cornell.edu/departments-centers-and-institutes/cornell-feline-health-center/health-information/feline-health-topics/feline-asthma-what-you-need-know.

#### TYPES OF CORTICOSTEROID MEDICATIONS AVAILABLE TO TREAT CAT ASTHMA

#### 1. FLUTICASONE PROPIONATE

Also referred to as brand names Flovent or Flixotide, fluticasone is the most commonly used inhaled corticosteroid. Fluticasone for cats is used to treat both feline asthma and bronchitis and is administered using a metered-dose inhaler.

#### 2. OTHER INHALED STEROIDS

There are several other inhaled corticosteroid options that are available, though none are as commonly used as fluticasone. Other options include beclomethasone, budesonide, ciclesonide (brand name Alvesco HFA), and mometasone (brand name Asmanex HFA).

#### 3. COMBINATION INHALERS

Some inhaled corticosteroids combine a steroid and a long acting bronchodilator into a single inhaler. With these medications, the steroid is intended to address the inflammatory response while the bronchodilator helps reduce constriction of the smooth muscles in the airways. Examples of these include combinations of fluticasone and salmeterol (brand names Advair, Seretide, Sirdupla, Sereflo, Serroflo, Salmeterol/Fluticasone Cipla), budesonide and formoterol (brand name Symbicort), and mometasone and formoterol (brand name Dulera).

#### 4. DEXAMETHASONE

Also referred to as brand names Decadron and Dexasone, dexamethasone is a systemic corticosteroid. Dexamethasone is used for acute management of an asthma or bronchitis flare-up and is usually administered by a veterinarian as an injection.

#### **5. PREDNISOLONE**

Also referred to as brand names Orapred, Pediapred, and Prelone, prednisolone is a systemic corticosteroid. Prednisolone is used to treat both asthma and bronchitis. Prednisolone for cats is available in pill form and sometimes administered via injection. The goal of using this drug is to only use as little as possible for a short amount of time.

#### **6. METHYLPREDNISOLONE ACETATE**

Also referred to as Depo-Medrol, methylprednisolone is a systemic corticosteroid that is administered via injection. These injections are likely to result in adverse effects so they are considered a "last-resort" treatment for both asthma and chronic bronchitis in cats.<sup>10</sup>



Claire Sharp, BSc, BVMS (Hons), MS, Diplomate ACVECC, Today's Veterinary Practice, "Treatment of Feline Lower Airway Disease" (https://todaysveterinarypractice.com/treatment-of-feline-lower-airway-disease/)



#### **Bronchodilators**

Bronchodilators expand airways that have become constricted and are an important medication in emergency situations. Bronchodilators are often referred to as rescue medication because they don't treat the underlying inflammation that brings on asthma.

Similar to corticosteroids, bronchodilators are available in inhaled forms that, when used with the AeroKat\* chamber, target the airways directly for rapid relief.

The difference between **corticosteroids** and **bronchodilators**: corticosteroids reduce inflammation and swelling while bronchodilators relax the muscles in the airways.

#### TYPES OF BRONCHODILATOR MEDICATIONS AVAILABLE

The bronchodilator drugs used to treat asthma or chronic bronchitis in cats are beta2-receptor agonists and methylxanthine derivatives." Of the two, beta2-receptor agonists are the most commonly prescribed bronchodilators for cats.

There are several types of these bronchodilator medications available, including:

#### 1. ALBUTEROL/SALBUTAMOL

Also referred to as brand names Proair, Proventil, or Ventolin, albuterol (or salbutamol) is an inhaled beta2-receptor agonist. It is used to treat both feline asthma and bronchitis and is administered using a metered dose inhaler (MDI).

#### 2. TERBUTALINE

Also referred to as brand names Brethine, Bricanyl, and Brethaire, terbutaline is a systemic beta2-receptor agonist. It is primarily used to treat feline asthma and is administered as a tablet or injection.

#### 3. LEVALBUTEROL

Also referred to as brand name Xopenex, Levalbuterol is a less common inhaled beta2receptor agonist. It is used to treat both feline asthma and bronchitis. Levalbuterol is available in a nebulizer solution or a metered dose inhaler, but is not commonly prescribed for cats

#### 4. THEOPHYLLINE

Also referred to as brand names Theo 24, Theochron, Elixophyllin, Aminophylline, and Uniphyl, theophylline is a systemic methylxanthine derivative that may be used for ongoing respiratory condition treatment in dogs than cats. 12 Theophylline is administered as a tablet



<sup>11.</sup> Claire Sharp, BSc, BVMS (Hons), MS, Diplomate ACVECC, Today's Veterinary Practice, "Treatment of Feline Lower Airway Disease" (https:// todaysveterinarypractice.com/treatment-of-feline-lower-airway-disease/)

12. Claire Sharp, BSc, BVMS (Hons), MS, Diplomate ACVECC, Today's Veterinary Practice, "Treatment of Feline Lower Airway Disease" (https://

todaysveterinarypractice.com/treatment-of-feline-lower-airway-disease/)



#### Other Medications

In some instances, antihistamines may be prescribed if the cat has significant allergies causing asthma attacks. Limited evidence is available to support antihistamines as a standalone treatment for cat asthma.<sup>13</sup>

## **Other Methods For Treating Cat Asthma**

In addition to corticosteroid and bronchodilator medication, there are ways to help manage cat asthma at home. Many of these strategies focus on controlling asthma attack triggers rather than the condition itself. There is little evidence to show these methods are effective as standalone treatments. Medication should always be the first line of treatment for cat asthma.

These methods may have a positive impact on inflammation and may help to prevent the onset of asthma attacks when used in conjunction with medication.

Feline asthma affects between 1% to 5% of all cats.

<sup>13.</sup> Claire Sharp, BSc, BVMS (Hons), MS, Diplomate ACVECC, Today's Veterinary Practice, "Treatment of Feline Lower Airway Disease" (https://todaysveterinarypractice.com/treatment-of-feline-lower-airway-disease/)

#### 1. Diet Modification

#### Follow a low allergen diet

Feeding your cat a low-allergen diet may help to reduce incidences of asthma attacks. Ask your vet for recommendations before switching your cat's food.

#### Manage obesity

Overweight or obese cats may already have breathing difficulties that worsen asthma symptoms. Modification to your cat's diet based on recommendations by your vet may help keep your cat's weight in check.

#### 2. Environment Modification



Ensure the cat's environment is well ventilated, smokefree, and clean



Change air filters on a regular basis



Avoid using fragrances, aerosols, and harsh chemicals



Use unscented, low dust cat litter

Although there are ways to modify your cat's environment to reduce the risk of asthma attacks, it is still important to take your cat to the vet. Medication is an important and potentially life-saving treatment for cat asthma.

## - Chapter 3 -

## Side Effects Of Medications

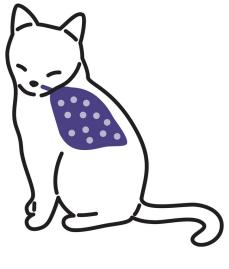
Short-term side effects are expected soon after a cat begins to take oral or injected corticosteroids. These effects will vary by dose. Long-term side effects are seen over time if a cat has been prescribed long-term treatment with oral corticosteroids. The severity of these effects depends on the dose and duration of treatment.

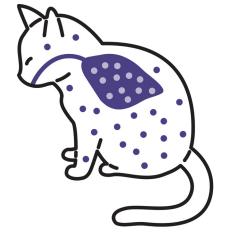


## **Side Effects Of Systemic Corticosteroids In Cats**

There are many side effects associated with oral and injected corticosteroid use in cats.

Systemic (oral/injectable) medications need to be processed by the body. Once in the bloodstream, they spread throughout the entire body system—only some of the medication goes to the intended target, the rest could impact other organs as well. As a result, systemic medications have many side effects to consider compared to inhaled medications.





**Inhaled Steroids** 

**Oral Steroids** 

#### **Short-term Effects Of Systemic Corticosteroids:**

- Loss of energy
- Increased risk of infection
- Increased thirst and appetite
- Weight gain

- Vomiting
- Diarrhea
- Panting
- Frequent urination

#### **Long-term Effects Of Systemic Corticosteroids:**

- Lethargy/fatigue (no energy to play)
- Change in behaviour (such as aggression)
- Suppressed immune system function
- Increased risk of bacterial/fungal infections
- Increased risk of urinary tract infections
- Poor wound healing
- Stomach ulcers

- Weight gain / obesity
- Impaired wound healing
- Cushing's disease
- Loss of bladder control
- Hair loss
- Increased blood pressure
- Allergic reaction
- Skin or coat changes<sup>14</sup>



<sup>14.</sup> Hunter, T., DVM, VCA Hospitals, "Steroid Treatment Long Term Effects in Cats" (https://vcahospitals.com/know-your-pet/steroid-treatment-long-term-effects-in-cats)



#### Can Cats Be On Oral Or Injected Steroid Medications Long-Term?

In the case of feline asthma, systemic steroids may be used by a vet during an asthma attack. However, because of the many side effects of using oral steroids, they should not be used for long-term disease control.

The goal of systemic steroids is often to get an immediate respiratory response if the cat is in distress. The cat can then be transitioned to inhaled steroids for regular management. According to Plumb's Veterinary Medication Guides, <sup>15</sup> the goal of oral steroid treatment is to find the lowest dose possible and use it for the shortest period of time. For chronic conditions that require ongoing treatment, this becomes problematic.

<sup>15.</sup> Plumb's Veterinary, "Prednisolone/Prednisone Medication Guide" (https://www.plumbsveterinarydrugs.com/sites/default/files/VMG-Prednisolone-Prednisone-2019-01-30-1259.pdf)

#### Why Inhaled Steroids Are Preferred Method Of Treatment

Inhaled corticosteroids are a safer alternative to oral and injectable steroids, lacking the side effects that can be common to systemic steroids. Inhaled steroids are designed to be used on an ongoing basis for inflammation and symptom control without exposing the cat to the risks of systemic medications. There are two key differences between inhaled and systemic steroids that make them safer:

#### 1. Inhaled Steroids Target The Lungs Directly

Inhaled corticosteroids target the lungs and airways directly. Unlike systemic steroids where only some of the drug reaches the lungs (and the rest is spread throughout the body), inhaled steroids go directly to the active site where they are needed.

#### 2. Inhaled Steroids Require A Much Lower Dose

Because Inhaled steroids target the lungs directly, the concentration of steroid can be much less. Systemic steroids have to be given in much higher concentrations to ensure that an appropriate dose reaches the airways after first being metabolized and then indiscriminately sent throughout the body.

Using a substantially lower dose to achieve the same therapeutic effect can significantly lower the risk of harmful side effects.





## **Side Effects Of Systemic Bronchodilators In Cats**

The difference between **corticosteroids** and **bronchodilators**: corticosteroids reduce inflammation and swelling, making them better for long-term management, while bronchodilators relax the muscles in the airways, and are primarily used in emergency situations.

One of the main differences between inhaled bronchodilators and systemic bronchodilators is the risk of side effects. Because systemic bronchodilators need to be processed by the body, they can affect other areas in addition to the lungs.

Some of the side effects of systemic bronchodilators include:

- Tachycardia (faster than normal heartbeat)
- Central nervous system (CNS) stimulation
- Tremors
- Hypokalemia (low levels of potassium in the blood leading to fatigue)
- Increased gastric acid secretion
- Gastrointestinal upset<sup>16</sup>

<sup>16.</sup> Claire Sharp, BSc, BVMS (Hons), MS, Diplomate ACVECC, Today's Veterinary Practice, "Treatment of Feline Lower Airway Disease" (https://todaysveterinarypractice.com/treatment-of-feline-lower-airway-disease/)



#### Why Inhaled Bronchodilators Are Considered Safe & Effective

The benefit of using inhaled bronchodilators (versus systemic bronchodilators in oral or injectable form) is the medication is delivered directly to the area where it is needed: the lungs. This means the drug works quickly because it doesn't need to be processed by the body first. It also greatly reduces the risk of side effects.

Another important benefit of using inhaled bronchodilators is ease of administration. If a cat is in respiratory distress, it is important to be able to get the medication into them quickly and easily. It can be very difficult to give a pill to a cat in normal conditions but it is even harder when they are struggling to breathe. Injections are another alternative, but taking your cat to the vet for injection can be risky when your cat is in need of immediate relief.

Inhaled steroids and bronchodilators are generally safer and more effective at treating cat asthma than traditional pills and injections.

## - Chapter 4 -

## How To Give A Cat An Inhaler

Just like inhalers are used to treat asthma in humans, inhalers can be used to treat asthma in cats. It's important to be familiar with how to use an inhaler in order to make sure your cat gets the medication they need.

For many, the thought of using a mask on their cat is terrifying.

However, most cats, including the grumpy ones, are accepting and can learn and love to use an inhaler mask. It certainly can be easier than trying to give your cat a pill, especially when in distress (like during an asthma attack).

## **Delivering Asthma Medication To Cats**

If your cat has been diagnosed with asthma, your vet may have prescribed aerosol medication in the form of a metered dose inhaler (MDI).

Since cats cannot be instructed when to take a breath, a spacer device needs to be used with the inhaler. These devices feature a mask and chamber that helps ensure your cat is getting the medication they need.



#### What You Should Look For In A Spacer Device

In the case of feline asthma, systemic steroids may be used by a vet during an asthma attack. When selecting a spacer/chamber device for your cat, it's important to look for one that is specifically designed for cats (such as the AeroKat\* Chamber). This ensures proper fit of the inhaler mask and that the medication gets delivered to your cat's lungs.

It's important that the device you choose has both a fitted mask meant for cats, the correct valve, as well as non-stick masks. Masks that are designed for human faces do not fit the same way on cats, meaning medication can leak out.

Keep an eye out for devices that have a mask meant for cats but are missing the valve designed for low inspiratory flow. These may be human products simply marketed towards cats. Make sure the mask is also designed not to pull or stick to ensure administering the medication is not an unpleasant experience for your pet.

It's important that the device you choose has both a fitted mask meant for cats, the correct valve, as well as non-stick masks.



#### The AeroKat\* Difference

The AeroKat\* is a cat-specific chamber that has a specialized valve that is designed for the low inspiratory airflow in cats. This means the valve opens easily with shallow breaths, allowing the medication to flow from the chamber and into your cat's lungs effectively. The AeroKat\* is also the only chamber with a dedicated Flow-Vu\* inhalation indicator, which moves when your cat inhales so you can confirm a mask seal, count breaths, ensure proper use, and be confident in medication delivery.

Not all chambers are created the same, which can lead to differences in how much medication is available for your cat to inhale.

The AeroKat\* Chamber has been designed to make more medication available to your cat and hold the medication in the chamber for a longer period of time. This gives your cat more time to inhale the dose before it is lost, which means less medication wastage

and potential cost savings of over \$1,200 per month compared to other anti-static chambers

The AeroKat\* Chamber is Made in Canada with Canadian and American parts by Trudell Medical International (est. 1922), the same makers of the AeroChamber\* valved holding chamber. The AeroChamber\* is used by physicians around the world to help people with asthma and chronic obstructive pulmonary disease.





Shop <u>AeroKat\* Feline</u> Aerosol Chamber

#### How To Give A Feline Asthma Inhaler To Your Cat

#### **Before Administering The Inhaler**

It is best to get your cat used to the device before trying to administer any medications. Familiarizing your cat with the chamber and mask helps when it's needed in emergency situations and make it less likely for your cat to get frightened and resist the device.

Make the experience as positive as possible for your pet. Use the condition, love, reward approach to help your cat adjust.

- Condition: Slowly and calmly familiarize them to the chamber (before administering a dose).
- Love: Give your cat hugs, pets, and cuddles before, during, and after treatment.
- **Reward:** Reward your cat with treats before and after treatment, especially when familiarizing your cat with the device.





#### **Tips For Starting Out**

- Start by just using the mask, and gradually build up to holding it on your cat's face for 20-30 seconds
- Once your cat becomes comfortable with the mask, attach it to the chamber and familiarize your cat with the entire device.
- You will notice the Flow-Vu\* inhalation indicator in the AeroKat\* Chamber move or flutter when your cat breathes in. This indicates a secure seal on your cat's face, when to administer medication, and helps count the number of breaths your cat takes once the medication is released into the chamber.

Still Not Sure If Your Cat Has Asthma?

Take the **Feline Asthma Assessment** to find out.

#### Steps For Giving The Inhaler To Your Cat

Once your cat is familiar with the mask and spacer, medications can be administered.

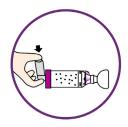
Follow these simple steps to give your cat an inhaler using the AeroKat\* Chamber:



1. Shake the inhaler and insert into the back of the chamber.



2. Gently apply the mask to your cat's face, covering the mouth and nose. The Flow-Vu\* indicator will move to confirm a good seal.



3. Depress the inhaler to release the medication.



4. Use the Flow-Vu\* inhalation indicator to count 7-10 breaths, then remove from your cat's face.

After treatment, use a damp cloth to remove any residual medication on fur.

If your vet has prescribed more than one puff of medication per treatment, wait 30 seconds before shaking and administering the next puff. Do not administer all prescribed puffs at once.

#### **Tips For Starting Out**

To make the process as easy as possible for you and your cat, use some of these tips when using the AeroKat\* Chamber:

- Before familiarization, lay the chamber on the ground to encourage curiosity
- Wipe some tuna fish or food inside the mask to encourage your cat to accept the mask on their face.
- Associate a positive response to the chamber by halting play for a minute and hiding the
  device behind your back. Bring it back out and reward with treats, hugs, and play.
- Swaddle your cat in a towel or blanket while administering treatment to ease nerves.
- If your cat gets frightened when pressing the inhaler, press the inhaler before placing the mask on its face. (Note that not all chambers are the same. The AeroKat\* Chamber is designed to hold the medication for a longer time so you can press the inhaler behind your back with limited risk of medication loss.

### Help Your Asthmatic Cat Live A Happy & Healthy Life

Your asthmatic cat can live a happy and healthy life provided their asthma is being treated properly. Giving your cat an inhaler, when used in conjunction with the AeroKat\* Chamber, is a quick way to ensure the medications your cat needs are directly reaching their lungs.

For cat owners, being informed about the side effects of injected and oral corticosteroid use is the first step in ensuring your cat is safe and healthy. Always be on the lookout for any side effects your cat may be showing after starting these medications.

Before starting your cat on oral steroids or if you are interested in transitioning away from systemic steroids, talk with your vet about using inhaled corticosteroid medications instead, and how the AeroKat\* chamber can help manage your cat's condition.



## **Cat Respiratory Symptom Tracker**

Use this symptom tracker to monitor suspected respiratory issues in your cat over the course of a week.

Week of:

Physical Symptoms										
Has your cat shown any of the following symptoms? If so, how severe are the symptoms?  Symptom severity:	DAY									
0 - None, 1 - Mild, 2 - Moderate, 3 - Severe	1	2	3	4	5	6	7			
Heavy/rapid breathing The normal rate of breathing for cats is about 25-30 breaths per minute at rest. Heavy/rapid breathing is more than 40 breaths per minute (when not playing or excited).										
Fatigue/lethargy  Your cat is lethargic after playing or is breathing heavier than usual after playtime.										
Breathing through the mouth  You may notice your cat is breathing through their mouth or panting.										
<b>Squatting position with neck extended</b> Your cat takes a position with their neck extended upwards and their body low to the ground.										
Blue lips and gums  Your cat's lips and/or gum start to turn blue.										
<b>Wheezing</b> Your cat makes a whistling or rattling sound made when breathing.										
<b>Coughing/hacking</b> A coughing cat sounds a bit different than a coughing human—it will sound like your cat is trying to pass a hairball.										
Behaviour Changes										
Has your cat shown any of the following behaviour changes? If so, how often?	DAY									
<b>Symptom severity:</b> 0 - Not at all, 1 - A Few Times, 2 - Some Of The Time, 3 - Most Of The Time	1	2	3	4	5	6	7			
No desire to play  Your cat no longer wants to play.										
<b>Hiding</b> Your cat is hiding from you.										
Fatigued  Your cat is much more tired and sleeping more than usual.										



Environmental Factors								
Has your cat been exposed to the following environmental factors? If so, how often?	DAY							
Symptom severity: 0 - Not at all, 1 - A Few Times, 2 - Some Of The Time, 3 - Most Of The Time	1	2	3	4	5	6	7	
Cold air								
Smoke or car exhaust								
Household sprays and chemicals								
Perfume or hairspray								
Essential oil diffusers								
Outdoors								
Cigarette smoke								
Notes:								

#### When To Take Your Cat To The Vet

If your cat's symptoms are non-existent or mild, it is unlikely they are suffering from a respiratory illness.

If your cat's symptoms are moderate to severe, it is possible they are suffering from asthma or another respiratory illness. Take your cat to the vet and bring the tracking sheet with you to help the vet understand your cat's condition.

If your cat's symptoms worsen, it is best to err on the side of caution. **Take them to the vet right away.**