



#### **MEDICAL INFORMATION DISCLAIMER:**

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### INTRODUCTION

Allergies are the result of an overreaction of the body's immune system to an element it perceives as foreign or toxic. When allergens enter the body through the nose and sinuses, the body releases chemicals (histamine and leukotrienes) leading to an allergic reaction.

Symptoms can vary by person, but they can include sneezing, coughing, fatigue, watery or red eyes, itchy nose, congestion, runny nose, cough, sore or scratchy throat, post-nasal drip, and sinus pain. When allergens enter the body via eating something foreign, then the symptoms are different with abdominal issues or hives/rashes usually. This article will not be discussing food or skin induced allergies and only focuses on environmental allergies.



# CAUSES OF ENVIRONMENTAL ALLERGIES

Allergies that are triggered by plants and pollen at different times of the year are known as seasonal allergies (seasonal allergic rhinitis). However when allergies are triggered by dust mites, animal dander or mold spores, patients can have symptoms year-round (perennial allergic rhinitis). In Southern California, pollen is present year-round, and many people experience seasonal allergies year-round as well. Allergies to various airborne elements in the environment are known as environmental allergies.



#### SEASONAL ENVIRONMENTAL ALLERGIES

Seasonal allergy triggers can vary by time of year, and in many areas, allergens are dormant in the winter, offering a break from symptoms. But in Southern California, the warm weather tends to make seasonal allergies a possibility at any time of year.

Some of the most common culprits of seasonal allergies in Southern California are trees, including ash, eucalyptus, mulberry, olive, oak, sycamore, walnut, and big sagebrush, especially during the first half of the year.





Grass pollen is also an extremely common allergy, particularly in the late spring and early summer. Rye grasses, bermuda grass, blue grass, and oat grasses can all cause an allergic reaction.

In the fall, weeds cause allergic reactions for many. Ragweed, wormwood, sagebrush, Russian thistle, among others can all trigger allergies.

Throughout the year in Southern California, pollen spreads easily because of the warm, dry, and windy climate.

#### PERENNIAL ENVIRONMENTAL ALLERGIES

Environmental allergies may also be caused by elements that can be present year-round, rather than those that make a seasonal appearance. An allergen is anything that triggers an allergic reaction and while there are many different kinds of environmental allergies, there are some that are very common.

#### **Dust mites**

One of the most common indoor environmental allergens is dust mites. These microscopic bugs are often present in the home, living in carpet, furniture and mattresses and prefer warm and humid environments.







#### Pets

There's a common misconception that pet hair causes allergies, but the hair is not usually the culprit. Short-haired and hairless pets can cause allergies as effectively as long-haired ones. Allergens from pets are very lightweight and can remain suspended in the air for much longer than those from other causes like cockroaches and dust mites. They also stick easily to furniture, bedding, and fabrics.

Pet dander is made up of microscopic flecks of skin shed by animals. It can end up in your house from household pets or rodents.

Allergies can also be triggered by proteins found in the saliva, urine, or feces of animals. Dried saliva can flake off of an animal's fur and become airborne, and dust from dried animal feces can also become airborne. Among household pets, more people are allergic to cats than dogs.



#### Mold

Some people have allergic reactions to mold spores. Mold flourishes in damp environments, so it can thrive in damp weather and in spaces that tend to be damp like kitchens, basements, and bathrooms. Many mold spores, however, also spread easily in dry, windy weather.

#### **Cigarette smoke**

Many people think they have an allergy to tobacco smoke, but most experts believe that the symptoms some people experience from exposure to it are not actually due to allergies. Tobacco products are filled with many toxic and irritating ingredients and chemicals which can exacerbate allergies, but not cause them.



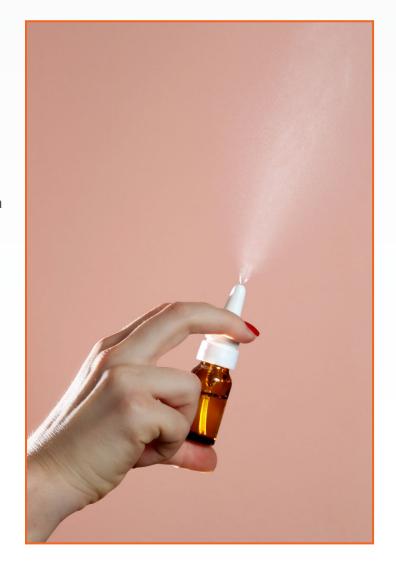
## TREATING ENVIRONMENTAL ALLERGIES

The treatment for allergies may be different, depending on if they're seasonal or perennial. The first step in allergy treatment is to get a proper diagnosis. Seasonal allergies can be easier to diagnose than some other types of allergies, usually through observation of when symptoms appear, but your doctor can also do an exam of your ears, nose, and throat to give a proper diagnosis.

For environmental allergies, a skin or blood allergy test is usually the first thing, in order to pinpoint the specific cause.

### SEASONAL ALLERGY TREATMENTS

Many people are able to effectively manage seasonal allergies using over-the-counter medications. Decongestants, antihistamines and intranasal steroid sprays can bring a lot of relief, but some medications can have side effects such as drowsiness, dizziness, or confusion. Some people need further medications, such as prescription steroid nasal sprays or allergy shots that work as immunotherapy to desensitize your immune system to allergens. Once environmental allergies have been diagnosed and if you've tried unsuccessfully to reduce exposure to them, your doctor may prescribe medical treatment which involves antihistamine medications and intranasal steroid sprays.





#### **ALLERGY SHOT TREATMENT**

If environmental allergies are severe, allergy shot treatment may be recommended and often a referral to an allergist is placed. This is known as allergen immunotherapy. It's a form of long-term treatment that can decrease symptoms of environmental allergies by decreasing sensitivity. Some people find long-lasting relief, even after treatments have ended.



These shots work in a similar way to vaccines. The body responds to a small injected amount of a certain allergen. Then you are exposed to gradually increasing doses of the allergen, allowing you to develop tolerance or immunity to it.

#### IN-OFFICE TURBINATE REDUCTION

When stubborn allergies are severe or debilitating, there are minimally-invasive procedures available to alleviate symptoms. One of these options is in-office submucous turbinate reduction. This is for patients suffering from nasal congestion, severe allergies, recurrent sinus conditions including sneezing, congestion, headaches, sinusitis and even snoring and sleep apnea. For many patients, the cause of this discomfort may be due to enlarged or inflamed turbinates.

The turbinates are three sets of small structures in the nose responsible for filtering and humidifying the air we breathe. When functioning properly, the turbinates will filter dirt, pollen, allergens, and other airborne irritants before they reach your lungs. In patients with significant nose and sinus issues from allergies or other causes, the turbinates can become significantly enlarged and hypertrophic and cause blockage of our breathing and sinus passages leading to recurrent severe nasal congestion and recurrent or chronic sinusitis.



#### TREATING ENVIRONMENTAL ALLERGIES

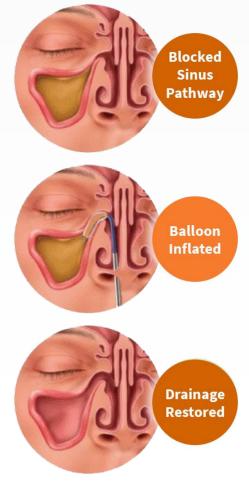
Minimally invasive in-office turbinate reduction can be done either with a cold laser called Coblation or via a small shaver called submucous resection of the turbinates (SMR). The laser procedure only shrinks the lining or mucosa of the turbinates whereas the SMR technique reduces the bone and mucosa with more long-lasting and permanent results.

Recovery is quick—usually less than 24 to 48 hours from this typically painless procedure. Patients usually show a marked improvement in the reduction of sinus pain, pressure, nasal congestion, sneezing, postnasal drip, and various other similar symptoms from allergies.

#### IN-OFFICE BALLOON SINUPLASTY

Another minimally-invasive option for severe allergy relief is in-office balloon sinuplasty. Chronic sinusitis, which is caused by inflammation of the paranasal sinuses, can result from allergies, and leads to headaches, facial and sinus pain, eye discomfort, ear congestion/infection, and even tooth pain.

Balloon sinuplasty is used to expand sinus pathways by reshaping the anatomy and thereby restoring proper drainage capabilities. When patients undergo in-office balloon sinuplasty, sinus surgeons place tiny balloons throughout the nose and sinuses. The balloons are then inflated to help permanently expand the sinus pathways and then immediately removed. By enlarging the sinus pathways, the likelihood of recurring infection is significantly reduced. In-office balloon sinuplasty does not require general anesthesia as it is done under simple topical/local anesthesia, and there is minimal recovery time following the procedure. Patients are amazed at how simple and quick it is without any nasal packing and they're usually back to work in 1-2 days.





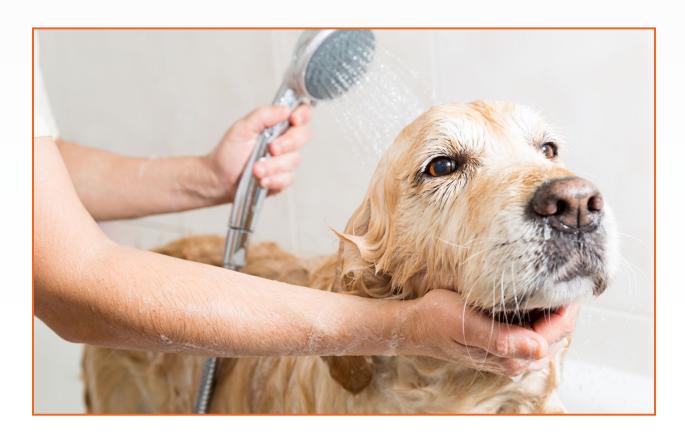
# PREVENTING ENVIRONMENTAL ALLERGIES

The first course of treatment for any kind of allergies is often to try to reduce exposure to allergens. The steps you can take are different depending on if your allergies are seasonal or perennial.

#### REDUCE EXPOSURE TO SEASONAL ALLERGENS

Trying to reduce exposure to allergens that trigger a reaction is a good first step. You can use an air conditioner with a HEPA filter and avoid outdoor activities when pollen counts are high. Avoid tobacco or marijuana smoke, which can make allergies worse.

After you go outdoors, especially when pollen count is high, take a shower to remove allergens from your body and wash your clothes. If you have pets who go outdoors, be sure to bathe them frequently so that they don't bring in allergens that trigger a reaction.





#### REDUCE EXPOSURE TO PERENNIAL ALLERGENS

The first step you can try for perennial environmental allergies is to reduce allergens in your home.

#### **Air filters**

You can improve the quality of the air in your home by using a high-efficiency particulate air filter (HEPA filter). This can improve the indoor air quality and reduce your exposure to allergens in your home, especially for people with dust mite allergies and even for those with pet allergies.

#### **Bed & bedding**

Your bedding can leave you exposed to a lot of allergens, including dust mites and pet dander. If you have pets, keep them out of your bedroom, and bathe them often. You can buy allergen-proof pillow cases and mattress covers for dust mites, but it's especially important to wash your sheets and bedding in hot water at least every week. Vacuum your mattress each week as well and you'll be able to get rid of a lot of dust mites and pet dander which can trigger allergies.

#### Air out your bathroom

If you have environmental allergies, keeping your windows closed on days with high pollen counts is a good idea, but if you have mold allergies it's important to make sure your bathroom is well aired, by opening windows to prevent mold from growing.



#### **Probiotics**

Some research shows a connection between gut bacteria and allergies, with participants who took probiotics reporting improved allergy symptoms.

#### **Good hygiene**

Keep your home environment clean to get rid of dust mites, pet dander, and mold, and to prevent pests from entering your home, which can also exacerbate allergies.



### IN CONCLUSION

Environmental allergies, both seasonal and perennial, are very common. Sometimes they can become severe and even affect your quality of life. Fortunately, there are many ways to prevent and treat environmental allergies, even for people who have severe cases.



## ABOUT C/V ENT SURGICAL GROUP

At C/V ENT Surgical Group, we take pleasure in providing unparalleled care to all our patients. Our team of ENT specialists and surgeons are highly skilled, experienced, and qualified to carry out various treatments and procedures to help patients with these conditions. Each of our physicians specializes in various aspects, including ear, nose and throat disorders, making them one of LA's finest specialists. Using our cutting-edge technology and equipment, we treat our patients with the expertise and compassion they deserve. Contact us today for a consultation with one of our ENT specialists.









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