## Allergic to your dog?

## What is an allergy?

An allergy is a reaction that occurs when the body's natural defenses (immune system) overreact to a foreign substance called an allergen. Allergens themselves are harmless; it is our body's extreme response to them that causes the unwanted symptoms.

How do allergies develop?
At any age our immune system can create unique proteins called antibodies that are programmed to recognize and respond to a specific allergen, even one that we have been around our entire lives. When this occurs, it is called sensitization. The next time the person is exposed to that allergen, the immune system recognizes it and attacks, causing an allergic reaction with associated symptoms. Though anyone can develop allergies at anytime, some families are more prone to them. Individuals do not inherit an allergy to a specific allergen, but the overall likelihood of developing allergies is increased when other family members have allergies.

## What are allergens?

Most allergens are proteins. Common sources of allergens include various foods such as peanuts, tree nuts, milk, eggs, fruit, fish, and shellfish. Non-food allergens include pollens, mold spores, dust mites, cockroaches, latex, insect venom (i.e. bee sting), drugs (i.e. penicillin), or animals. Animal allergens are typically found in urine, saliva, skin, and feces; and can be carried on hair and dander (tiny scales from skin, hair, or feathers). Allergens from pets are small and lightweight so once in the air, they can remain suspended for long periods of time eventually settling down on carpets, bedding, furniture, and other items in the home. Additionally, people can carry pet allergens on their hair and clothing.

## How common are allergies to pets?

It is estimated that 30 to 40 percent of the world's population suffers from one or more allergic disorders and the prevalence of allergic disease has been rising worldwide. Among U.S. citizens of all ages, allergies are the fifth leading cause of chronic diseases, and asthma (often triggered by allergies) is the third most common chronic disease in children under eighteen years old. In addition, the Asthma and Allergy Foundation of America reports allergies to pets are very common affecting millions of Americans. An estimated 15 to 30 percent of people with allergies have a reaction to cats or dogs, with cat allergies being twice as common as dog allergies.

## What are the symptoms of pet allergies?

A common misconception regarding pet allergies is that the development of aches and pains or fever is part of the normal allergic response. That is not true. Pet allergies typically cause nose, eye, skin, and respiratory (lung and throat), symptoms. These may lead to a decreased quality of life, including difficulty sleeping and a lack of energy.

## Nose and eye symptoms:

- Sneezing
- Runny or stuffy nose
- Red, itchy, or watery eyes
- Itchy nose, throat, or roof of mouth


## Skin symptoms:

- Dry, itchy skin
- Rashes, hives

Those whose pet allergies trigger allergic bronchitis or asthma, may also develop the following

## Respiratory symptoms:

- Cough
- Wheezing (whistling sound) when breathing
- Chest tightness
- Shortness of breath

In extreme pet allergy cases, a severe reaction can occur, known as anaphylaxis, in which the allergic individual may experience itching, hives, swelling, respiratory distress, shock, and even death.
In general, symptoms will worsen when a person is exposed to greater amounts of allergens or when several different types are present. Therefore, reducing the exposure to allergens can reduce the severity of the symptoms.
If I am allergic, can I still have a pet?
There are many options for controlling and reducing allergies through reduction of exposure to allergens and/or treatment of symptoms. Therefore, most people are able to keep their pets while managing their allergies.

## What should I do if I think I have allergies to my pet?

Some people assume they have a pet allergy based on their symptoms, it is important to see your doctor in order to be certain that you are directing allergy prevention strategies, like those detailed here, at the correct cause of your symptoms.


## Myth: My dog's hair/fur causes my allergy symptoms.

Fact: The primary dog allergen is produced in the salivary glands making saliva the main source. The allergens can be deposited on the dog's fur through licking, and once the fur dries, the particles can flake off and become airborne. Additionally, there are other minor allergens also shed by dogs that can trigger allergies. One of the newly discovered allergens is found in dog urine and is believed to contribute to an increasing number of allergic reactions to dogs.

## MYTH: Hypoallergenic dogs produce no allergens so they do not cause allergies.

FACT: All dogs produce allergens. The level of different types of allergens may vary between individual dogs, but this is not due to a specific gender, breed, or breed mix. Some allergic individuals tolerate some dogs better than others due to variations in amounts and types of allergens produced. However, in spite of advertising claims and higher prices, no dogs are truly hypoallergenic.

## MYTH: The length of my dog's hair/fur affects the amount of allergen produced.

FACT: The production of dog allergens is not related to hair type or length. Even hairless dogs produce allergens. Some dogs do shed less hair than others and that may impact how widely allergens are spread in the environment; however, even that does not guarantee a reduction in allergen exposure. Regardless of hair characteristics, allergens are still produced in the dog's saliva and urine.

Reduce your exposure to allergens by following the allergy prevention tips below.
Reducing the amount of allergens in your household can dramatically reduce symptoms of allergies. Best results in reducing allergens are found when the recommendations listed here are applied consistently over time. It may take weeks before results are noticed.

## Can medical treatment help?

When reducing allergen exposure is not enough, there are many options for controlling allergies and reducing symptoms through medical management. Depending on the severity of signs, over the counter (OTC) medicines may provide temporary allergy relief for symptoms such as runny/itchy nose and throat, sneezing and itchy/watery eyes. In all cases talking with your doctor is highly recommended; as some people may benefit from prescription medicine, allergy immunotherapy (allergy shots), or other medical treatments. Some with severe allergies and asthma may be discouraged from owning pets; however, most people can effectively manage their symptoms.

## What should I do if I cannot keep my dog?

If prevention and treatment efforts are not enough and your allergy symptoms are severe, you may need to find a new home for your dog. Ask family and friends about placement options before contacting your local animal shelter. It is also important to understand that having an allergy to one type of animal increases your risk of allergy to another, but it does not guarantee it. Many people are allergic to dogs, but not necessarily allergic to other common pet species.
$\square$ When laundering bedding, clothing, and other washable items (including dog beds) use high temperatures and detergents to remove more allergens.
$\square$ Vacuum regularly, at least once a week, with a good vacuum cleaner that is equipped with a HEPA filter to prevent outflow of the contents (including pet allergens) that have been swept up.
$\square$ Allergic individuals should avoid cleaning and vacuuming themselves, or wear a disposable dust mask (available at the local pharmacy or hardware store) in order to prevent inhalation of pet allergens. After cleaning it will take a few hours for allergens released into the air to settle back onto the surfaces.
$\square$ In addition to using a HEPA filter in household heating and cooling systems, the use of an air purifier with a HEPA filter in the room where pets spend the most of their time will reduce the concentration of allergens in the air.
$\square$ When possible, replace carpet with smooth flooring (e.g., wood, tile, linoleum) as carpets are the primary reservoir of allergens in the home.

