

A.I.R Informant

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Tree allergy season is quickly approaching. If you think your child suffers from tree allergies, you may be interested in a research study being conducted at ASTHMA, Inc. More details inside.

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Trees 'n Sneeze

Pollen. That downy dust that travels windswept across our yards and along streets. That wonderful gift of Mother Nature that allows trees to reproduce and survive. That lowdown sticky stuff that coats our cars, flies up our noses, and gets sucked down our throats to cause weeks of misery for over 14 million Americans every year.

Pollen is the male fertilizing agent of flowering trees, grasses, weeds, and other plants and is composed of powdery granules that range in size from microscopic to visible yellow flakes. Pines and oaks produce the largest pollen molecules; this is the pollen that you can actually see. As for the really tiny pollen, scientists tell us that its small size and light weight allow it to be carried by the wind.

Of course, only some unfortunates are allergic to pollen. An allergy is an abnormal response to substances that are ordinarily harmless. These substances, when they provoke an allergic reaction, become known as allergens. Technically, when an allergen is absorbed into the body, it stimulates the production of allergic antibodies, which react with the body's cells to produce and inflammation or irritation in particularly sensitive areas—the eyes, nose, lungs, and digestive system. Severe asthma, bronchitis, and skin rashes are all common pollen-caused miseries. In layman's terms, it means you sneeze and sniff for weeks.

Though we may think we are safer from the offending plants in the cities, allergies in heavily polluted areas are more common and more severe. This is because manmade pollutants, especially nitric oxide, a major component in air pollution, react with pollen to make it more immunogenic (more apt to stimulate the immune system). In addition, the mucus membranes in the eyes, nose, and throat are already raw and irritated by these pollutants.

There are of course many over-the-counter allergy medications like antihistamines and decongestants that offer short-term relief, and allergists can provide prescription drugs for more intense reactions. We can also avoid pollen by staying inside, using air conditioning and an air filter.

The other option is immunotherapy. Though a hereditary condition like an allergy cannot be cured completely, immunotherapy helps people to survive the allergy season in more comfort. In immunotherapy, sterilized extracts of the offending pollen are injected, in increasing dosage, once a week. This process continues for about 16 weeks, or until an immunizing dosage is reached. After that, monthly booster shots are necessary, all year-round, for about five to eight years. These injections cause the body to produce new antibodies to counteract the allergic

antibodies.

This allergy thing, then, is more complicated than just sneezes in the springtime. As Dr. Mary Jelks, a prominent Florida allergist, points out, "There are still a lot of puzzle pieces to put together; once we do that, we'll know more." In the meantime, next time we're stumbling blindly, tissues in hand, through another pollen-filled day, we should remember that all our suffering is in the name of healthy tree populations. With that noble thought in mind, we can flee indoors.

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| Description | Oral and Nasal Antihistamines Blocks histamine, one of the most important mediators of the allergic response, and its release leads to many allergy symptoms, including itching of the eyes and nose, runny nose, and sneezing. |
| Advantage | Blocks what histamine does in the nose and eyes of allergy sufferers. |
| Disadvantage | They are not very helpful for congestion. |
| Description | Nasal inhaled corticosteroids Reduces and controls the impact of all or most of the mediators that can cause inflammation in the nose. |
| Advantage | It improves all of the nasal symptoms of allergic rhinitis, including itching, runny nose, and congestion. |
| Disadvantage | Lack of effectiveness for eye symptoms and the potential for nasal irritation. |
| Description | Decongestants These medications are important in the care of allergic rhinitis because congestion is, for the majority of patients with allergic rhinitis, the most troublesome symptom. |
| Advantage | May lead to vasoconstriction (narrowing of the blood vessels) in the nose, which directly reduces mucus volume. |
| Disadvantage | May lead to difficulty sleeping, anxiety, and increased heart rate. |
| Description | Leukotriene modifiers Blocks the action of leukotrienes, a mediator of allergy symptoms and of inflammation. |
| Advantage | Ability to block both the early response to allergic triggers (itching and sneezing) as well as the delayed response to allergic triggers (congestion). Medication is mild and has few side effects. |
| Disadvantage | Drug class does not have much of a track record in the treatment of allergic rhinitis; more clinical research needs to be published about the use of this medication for this condition. |

Courtesy of American Academy of Allergy, Asthma, and Immunology



Do you have a 6 to 11 year old with allergies?

ASTHMA, Inc. is looking for kids with spring or tree allergies to participate in a research study!

Qualified participants:

- must have a two year history of tree allergy symptoms
- are compensated for time and travel
- receive all study-related diagnostic testing, medical care, and investigational medication at no cost

For more information, please contact ASTHMA, Inc.

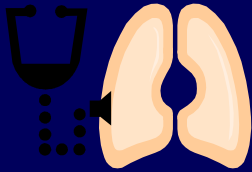


Is your asthma raining on your parade despite using daily asthma medication?

ASTHMA, Inc. needs volunteers for a 24 week study who:

- Are aged 18-50
- Have poorly controlled asthma despite using daily inhaled steroids
- Are non-smokers

Benefits for qualified volunteers include investigational medication, study related physical exams and medical testing, and compensation for time and travel.



Do you have asthma?

If so you may qualify for a research study that is being conducted by ASTHMA Inc. research center! Qualified participants must:

- Be at least 12 years of age
- Have a diagnosis of asthma for at least 12 months.
- Use daily medication to control your asthma.

Benefits include investigational medication, physical exams and medical testing at no cost to you. Compensation for time and travel awarded to qualified participants.



Do you have eczema or atopic dermatitis?

Have you used PROTOPIC® (tacrolimus) ointment before you were 16 years of age to treat your eczema? Would you be interested in participating in a long-term program that will monitor your health? You may be eligible to participate in an observational research study. Talk to your physician if you would like to learn more about this important program.

Have asthma? Do allergies make it worse?

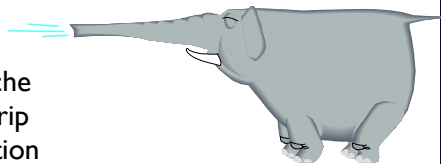
ASTHMA, Inc. is conducting a research study for people 12 years and older with asthma who have symptoms around dogs, cats, trees, grass or dust. Only 6 visits over 4 weeks! Qualified participants will receive compensation for time and travel. All study-related diagnostic testing, investigational medication and medical care provided at no charge to you.



Do you think you have a sinus infection? Before you treat your symptoms, call us!

Symptoms may include:

- facial pain
- sinus headache
- post nasal drip
- nasal congestion



If you are 12 years or older, in general good health and don't have asthma, you may be eligible to participate in our research study! Only 5 office visits and one phone call over 2 months. If you qualify, you will receive diagnostic procedures, physical exams, and, if sinusitis is diagnosed, antibiotics and study medications at no cost to you! Qualified participants receive compensation for time and travel.

During the study no other medications (aspirin, Tylenol, nasal sprays, antibiotics, etc.) are allowed.

Fighting Indoor Allergies

As the winter weather gets colder, people tend to spend more time indoors cuddling up with a warm blanket or reading a good book near the fireplace. But for some, staying indoors may provoke allergy symptoms of sneezing, coughing, itching and wheezing. There are over 40 million people throughout the country who suffer from indoor allergies 365 days a year. The body reacts to inhaled airborne particles called allergens. These indoor allergens usually include particles from dust mites, cockroach droppings, as well as indoor mold spores and animal dander, which is the dead skin and dried saliva from pets. Perennial, or year-round, allergy sufferers deal with stuffy or runny noses, itchy, watery eyes, sneezing, and wheezing all year long.

Indoor allergy sufferers will often wheeze, sneeze, cough and hack their way through the winter months, thinking they have a chronic cold. In actuality, they probably don't. Some symptoms between a cold and allergies are similar: sneezing and a stuffy or runny nose. But, if your symptoms are also accompanied with a fever, sore throat, colored nasal discharge, and aches and pains, then you probably have a cold. With allergies, there is never a fever, the nasal discharge is clear, and eyes may become red and itchy. Furthermore, while a cold usually lasts about a week, allergies can last all year.

Text and chart courtesy of American Academy of Allergy Asthma and Immunology 2004

Allergy Avoidance Tips

Dust Mites

- Change and clean cooling and heating system filters once a month.
- Have your home, car and office vacuumed and dusted frequently.
- Wash blankets and bedspreads weekly and sheets and pillowcases more often. Be sure that the water is above 130 degrees F.
- Try to regularly wash curtains.

Indoor Mold

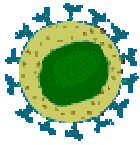
- Keep bathroom and kitchen surfaces dry, fix leaky plumbing, and seal cracks where water can seep in to avoid mold buildup.
- Reduce humidity in damp areas by using a dehumidifier. Clean dehumidifiers once a week.

Cockroach Allergens

- Remove all food sources and household food wastes. Food should be stored in sealed containers.
- Consider a professional exterminator
- Thoroughly and frequently clean to remove dust and cockroach byproducts.

Pets

- If you have a cat or dog, it might help reduce household allergens by washing your pet once a week.
- Do not sleep with your pet. Sleeping with your pet, long or short-haired, greatly increases the amount of contact with unwanted allergens.
- Make the bedroom a pet-free zone.



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Hygiene Hypothesis

The hygiene hypothesis is a general hypothesis stating that as society changes our environmental exposures from a more rural landscape with animals, bacteria and “dirt,” to a more sterile environment, the immune system has begun to over-react to food items, environmental stimuli and viruses that were once considered benign. In very simple terms, as we get cleaner, we may see more allergic disease.

There are many layers to the hygiene hypothesis that go well beyond, “dirt is good, clean is bad.” Some research has shown that endotoxins (a byproduct of certain bacterial cell walls) can play a major role in terms of how the immature immune system develops. Larger community studies have shown that allergic diseases are more prevalent in more industrialized countries compared to ones that are considered rural.

Recently, the hygiene hypothesis has received

much attention in the media, as well as in scientific literature regarding the development of allergic disease and other diseases such as diabetes, lupus and other chronic diseases.

Although the hypothesis has many supporters, careful interpretation of it is important. Families should not assume that if a person is already allergic, that they can make their environment “dirtier” to make it less allergic, or in fact reduce the chances of children becoming allergic.

Nevertheless, the hygiene hypothesis allows for researchers to understand the inner workings of the immune system at a very early stage and it should produce new strategies of how to handle the rise of allergic disease.

*Courtesy of American Academy of Allergy
Asthma and Immunology*

Sudoku

*Find more sudoku puzzles
at www.sudoku.com*

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