

April 12, 2010

As of April 12, 2010, Atlanta has reached the second highest pollen count on record, according to information released on The Weather Channel. Today, the city of Atlanta hit a pollen count that reached in excess of 5,700. **Typically, a high number of pollen particles in a pollen count would be 120.** In Valdosta for the month of April, every day has reported *Very High* pollen counts. You can find daily pollen counts on Weather.com and add the zip code for the region you are interested in. The unusually cold temperatures this winter is being cited as the reason for the unusually high pollen level in the southeastern states. The several cold snaps that struck the region are believed to have delayed pollination of oak trees, as well as cypress and various species of pine trees. Due to the high numbers of allergic reactions in response to the pollen, here is information to help you cope with your symptoms during this high pollen season.

## WHAT IS POLLEN?

The types of pollen that most commonly cause allergic reactions are produced by the plain-looking plants (trees, grasses, and weeds) that do not have showy flowers. These plants manufacture small, light, dry pollen granules that are custom-made for wind transport; for example, samples of ragweed pollen have been collected 400 miles out at sea and 2 miles high in the air. Because airborne pollen is carried for long distances, it does little good to rid an area of an offending plant - the pollen can drift in from many miles away.

In addition, most allergenic (allergy-producing) pollen comes from plants that produce it in huge quantities - a single ragweed plant can generate a million grains of pollen a day.

## WHEN DO PLANTS MAKE POLLEN?

One of the most obvious features of pollen allergy is its seasonal nature - people experience its symptoms only when the pollen grains to which they are allergic are in the air. Pollen counts tend to be highest on warm, dry, breezy days and lowest during chilly, wet periods.

## WHAT IS POLLEN ALLERGY?

During an allergic reaction you may feel a combination of the following symptoms: sneezing, wheezing, nasal congestion, coughing, itchy watery eyes, runny nose, itchy throat, stomach ache, and itchy skin, hives, fatigue, and irritability.

The signs and symptoms of pollen allergy are familiar to many:

- Sneezing, the most common, may be accompanied by a runny or clogged nose
- Itching eyes, nose, and throat
- Allergic shiners (dark circles under the eyes caused by restricted blood flow near the sinuses)
- The "allergic salute" (persistent upward rubbing of the nose that causes a crease mark on the nose)
- Watering eyes
- Allergic Conjunctivitis (an inflammation of the membrane that lines the eyelids, causing red-rimmed eyes). This is not the same as Bacterial or Viral Conjunctivitis.
- In people who are not allergic to pollen, the mucus in the nasal passages simply moves these foreign particles to the throat, where they are swallowed or coughed out. But something different happens to a pollen-sensitive person.
- As soon as the allergy-causing pollen lands on the mucous membranes of the nose, a chain reaction occurs that leads the mast cells in these tissues to release histamine. This powerful chemical dilates the

many small blood vessels in the nose. Fluids escape through these expanded vessel walls, which causes the nasal passages to swell and results in nasal congestion.

- Histamine can also cause itching, irritation, and excess mucus production.

## HOW IS POLLEN ALLERGY TREATED?

There are three general approaches to the treatment of pollen allergy; avoidance of the allergen, taking medication to relieve symptoms, and immunotherapy or injection treatments (commonly called allergy shots). Although no cure for pollen allergy has yet been found, one of these strategies or a combination of them can provide various degrees of relief from allergy symptoms.

### Avoidance

Complete avoidance of allergenic pollen means moving to a place where the offending plant does not grow and where its pollen is not present in the air. But even this extreme solution may offer only temporary relief since a person who is sensitive to one specific weed, tree, or grass pollen may often develop allergies to others after repeated exposure. Thus, persons allergic to ragweed may leave their ragweed-ridden communities and relocate to areas where ragweed does not grow, only to develop allergies to other weeds or even to grasses and trees in their new surroundings. Because relocating is not a reliable solution, allergy specialists strongly discourage this approach.

There are other ways to evade the offending pollen: **remaining indoors in the morning, for example, when the outdoor pollen levels are highest.** Sunny, windy days can be especially troublesome. If persons with pollen allergy must work outdoors, they can **wear face masks** designed to filter pollen out of the air reaching their nasal passages. As another approach, some people take their vacations at the height of the expected pollinating period and choose a location where such exposure would be minimal. The seashore, for example, may be an effective retreat for many with pollen allergies.

Air conditioners and filters. Use of air conditioners inside the home or in a car can be quite helpful in reducing pollen levels. Also effective are various types of air-filtering devices.

Avoiding Irritants. During periods of high pollen levels, people with pollen allergy should try to **avoid unnecessary exposure to irritants such as dust, insect sprays, tobacco smoke, air pollution, and fresh tar or paint.** Any of these can aggravate the symptoms of pollen allergy.

### Medication

For people with seasonal allergies who find they cannot avoid pollen, the symptoms can often be controlled with medication available by prescription or over the counter.

Effective medications that can be prescribed by a physician include antihistamines and corticosteroids. Any of which can be used alone or in combination. There are also many effective antihistamines and decongestants that are available without a prescription.

Antihistamines. As the name indicates, an antihistamine counters the effects of histamine, which, as described before, is released by the mast cells in the body's tissues and contributes to the allergy symptoms. For many years, antihistamines have proven useful in relieving sneezing and itching in the nose, throat, and eyes and in reducing nasal swelling and drainage.

But many people who take antihistamines experience some distressing side effects: drowsiness and loss of alertness and coordination.

Nasal Decongestants. Over-the-counter products containing decongestants can be helpful in relieving blocked nasal passages. These drugs constrict the blood vessels in nasal tissue, lessening swelling and mucus production. Because these drugs can raise blood pressure, increase the heart rate, and cause nervousness in some people, persons with allergies should check with their doctors before using decongestants.

People with allergic rhinitis should avoid using decongestant nasal sprays because frequent or prolonged use can lead to a "rebound phenomenon," in which the initial effect of shrinking the nasal passages is followed by increased swelling and congestion. When this occurs, a person often will use the spray in higher doses or more frequently, in an attempt to get relief from congestion. Instead of improving nasal congestion, however, such use of nasal sprays only intensifies the problem.

Combination therapy. Sometimes antihistamines or nasal corticosteroids are not effective when used alone, but when prescribed in combination, these agents can often provide significant, if not total, relief from hay fever.

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**Resources:**

The Weather Channel **or** [www.weather.com](http://www.weather.com)

U.S. Department of Health and Human Services Public Health Service National Institutes of Health