

# *The* Hay Fever Handbook

Don't suffer through the pollen season. We've got the guide to get you under control – and outside.

by JANET FRENCH

**A**h, spring! The budding trees, the warming wind – and the congestion, sneezes, wheezes, sinus pain, watery eyes and antihistamine shopping. Don't despair, fellow allergy sufferer. The good news is with improved knowledge and newer medicines, you and your allergic kids can all gain considerable control over tree and grass pollen symptoms – and even enjoy this glorious season.

To help you get there, *Allergic Living* offers this comprehensive guide to understanding and gaining control of allergic rhinitis, better known as hay fever.

## What Happens

In spring, the nose and airways feel what the eyes do not always see. Billions of tiny pollen grains take to the air in nature's annual ritual of plant reproduction. Many trees and grasses rely on the wind to blow those grains around in search of the correct plant mate. It's an inefficient process, and with the odds of a match slim, trees and grass churn out exponentially more grains than will ever fertilize a seed.

Most people can bask in the spring air, unaffected by this largely invisible haze of pollen. But an estimated 57 million North Americans are not so fortunate. Those people have immune systems that respond to certain specific pollens as if

they were invaders, and they begin to create IgE (immunoglobulin E) antibodies to defend against these perceived foes.

The trouble starts, allergist and aerobiologist Dr. Richard Weber explains, when pollen grains land on moist surfaces inside your nose, eyes, or at the back of your throat. The dampness allows the grain to break down into smaller particles coated with allergy-stimulating proteins. In people who have developed pollen allergies, the IgE antibodies are attached to other cells (called mast cells) and are laying in wait.

When the offending pollen protein is spotted, a cascade of defensive activity is set off inside you, including the release of powerful chemicals like histamine. Blood vessels dilate and release fluid into tissues, causing swelling. Biochemical signals tell glands to produce more mucus, says Weber, a professor of medicine at National Jewish Health in Denver.

The result? A runny and itchy nose, red, irritated eyes, coughing, and sometimes sinus pain, headaches, and even rashes. When cells release allergic chemicals in the nose, they don't just hang out locally. Florida allergist Dr. Dana Wallace says they travel throughout the body, including to the lungs. Along with other smaller inhaled particles, such as dust-mite allergen and mold, this can trigger asthma, including shortness of breath and wheezing.

## Pollen-Ready

If you suspect you may have developed allergic rhinitis, how do you know if you need treatment? Waking up in the morning with



## How pollen makes us sneeze and wheeze

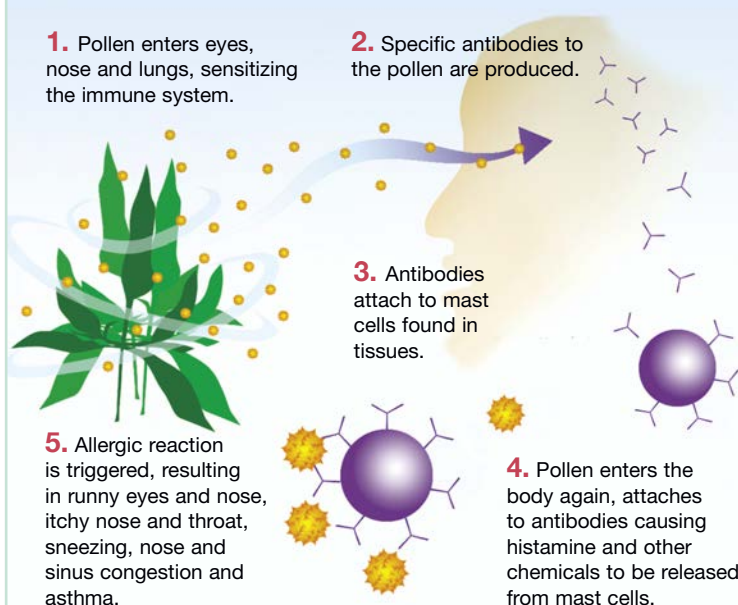
**1.** Pollen enters eyes, nose and lungs, sensitizing the immune system.

**2.** Specific antibodies to the pollen are produced.

**3.** Antibodies attach to mast cells found in tissues.

**5.** Allergic reaction is triggered, resulting in runny eyes and nose, itchy nose and throat, sneezing, nose and sinus congestion and asthma.

**4.** Pollen enters the body again, attaches to antibodies causing histamine and other chemicals to be released from mast cells.



a partially blocked nose is a call to action, says Dr. Paul Keith, an allergy and immunology professor at McMaster University in Hamilton, Canada. It may not bother you that much, but it could be a sign of more intense congestion to come.

“People often put up with those symptoms,” he says. “They’ve accepted they’re congested every morning, and don’t treat them. Then they get in the season and they’re much worse.”

With a known history of allergies, you’ll want to visit your family doctor or allergist in advance of the season to fine-tune your treatment plan before pollen is permeating the air. If you’re really bothered by symptoms, you may be a good candidate for the long-term relief of immunotherapy. With asthma, you should have an action plan that addresses pollen season, which you’ve worked out with a health professional. It will often say to ramp up inhaled corticosteroids a few weeks in advance of pollination.

Avoidance is also a strategy. While evading a substance that’s everywhere seems impossible, there are effective ways to do it.

Pollen is tougher to avoid when out and about, so Wallace advises patients to stay inside during peak pollination times, which are in the morning between about 5 and 10 a.m., and again near dusk. This is more challenging in southern climes. For instance, where Wallace practices in Fort Lauderdale, grass pollen season runs 11 months of the year. If sinus pressure and pain dogs you, she suggests trying a neti pot or other sinus rinse right after you come inside.

Those who want to gain the upper hand on hay fever symptoms are smart to make plans according to the weather forecast. Pollen counts are usually highest on warm, sunny and dry days. Humid and rainy conditions are the friend of the allergy-prone: Weber says that moisture appears to weigh down the pollen, so it can’t easily ride on the wind. For the most reliable pollen forecasting, look up the National Allergy Bureau counts at [www.aaaai.org](http://www.aaaai.org).

Interestingly, researchers have even found that humidity causes pollen-releasing structures in tree flowers to close. “The plant seems to understand it’s not effective to be releasing a lot of pollen in rainy conditions,” Weber says.

How wind affects your symptoms depends on where you live. If you’re landlocked and surrounded by grasses and trees, no wind is good wind. If you’re next to the ocean, pollen counts tend to be lower when the wind is blowing off the water.

## Slyer Symptoms

In addition to some of the more obvious airways symptoms, did you know sleep deprivation, fatigue, irritability, hearing loss, sore throat, and even a lackluster sex life can all be attributed to seasonal allergies?

**Draggy Days:** When pollen's at its pinnacle, patients with poorly controlled symptoms aren't sleeping well, and Wallace says that can make them dysfunctional during the day. After waking again and again to blow their noses, or snuffling themselves out of slumber, most adults power through the workday because they can't afford to miss it.

"They probably are about 50 percent productive on those days, constantly blowing their nose, sneezing, having nasal congestion and feeling very fatigued," Wallace says. "When I question my patients, they don't realize that it's the allergies having such a huge impact on their quality of life."

**Sex Life:** It makes sense, then, that people whose symptoms are

under control have more active sex lives. There's even some research showing the better your sense of smell (which is interrupted by a stuffed nose), the more you're loving the lovin'.

**Food Combo Pack:** Thanks to pollen's intricate link with oral allergy syndrome (also called pollen-food allergy syndrome), some people with pollen allergies experience a cross-reaction when eating foods that contain similar proteins. So, a person allergic to birch trees may experience an itchy and swollen tongue and lips when eating an apple or a carrot – since the proteins "look" the same to the immune system.

While cross-reactivity is often year-round, it can be heightened when pollen's at its peak. Take 7-year-old Sabrina Staats – she has

## KNOW YOUR POLLEN CULPRITS

**N**ot sure what you're reacting to? An allergist will use skin-prick tests, blood tests and a history of your symptoms to confirm your allergies. It's helpful to know since different plants pollinate at different times, depending on where you live.

Allergy shots and other immunotherapies that could reduce or eliminate your symptoms are also specific to each allergen.

If the weepy eyes and itchy nose are dragging on for months each spring, you could be allergic to both trees and grass. In much of North America, trees begin releasing pollen from March or April. Grasses usually don't begin churning it out until May, and it often lasts into July. (The season is longer in more temperate climates.)

What trees are likely to bother you varies a lot across the nation.

**Pacific Northwest:** Red alder is the major offender. Juniper, Cedar, poplar, birch, and Garry oak are also triggers.

**Colorado:** Juniper, poplar, cottonwood, aspen, elm, maple, alder, oak, and lodgepole pine are the big players.



Birch trees



Japanese cedar



Pine Pollen

**California:** Eucalyptus, silver wattle, almond, casuarinas, camphor, Japanese cedar, cypress, and box elder all thrive on the coast.

**Texas and Oklahoma:** Mountain cedar (a species of juniper) is a legendary irritant in these parts. The eastern red-cedar, ash, elm, and box elder are other culprits.

**Arizona:** Surprise – some desert ragweeds pollinate in the spring rather than fall.

**Midwest/Prairies:** Oak, birch, walnut, mulberry, cottonwood, aspen and box elder are repeat offenders.

**Northeast:** Oak, birch, pine, juniper, elm, maple, sweetgum, cottonwood, and mulberry trees are problematic.

**U.S. Southeast:** Add to the mix of cedar, oak, elm and juniper, the heat-loving olive, the palm tree, and Chinese pistache. Some elms pollinate in the fall, drawing out sniffle season.

Throw mold or dust-mite allergy into the mix, and it's pretty hard to tell from timing alone what's causing the problem. Molds, which thrive in moist environments, and dust mites tend to be year-round irritants.

oral allergy reactions to at least 23 foods, her mom Cynthia Staats says. The Virginia family has a chart on the fridge listing what foods Sabrina must avoid outright, what's safe when cooked (heat can diminish OAS-related proteins), and what's safe when raw, depending on the time of year. Foods such as watermelon, celery, avocados, and carrots almost always prompt Sabrina to develop hives, an itchy mouth, and an upset stomach. She is among those who must take extra care during pollen season.

## Surprising Hurdles

**Thunderstorms:** While a rainy day is often perfect for the allergic person's jog, there is an exception. Thunderstorms stir up grass pollen, while also creating perfect conditions for mold, another big allergy offender. A study from University of Georgia and Emory University revealed a 3 percent jump in emergency room visits for asthma in Atlanta-area hospitals the day after a thunderstorm.

Weber says that such a storm creates a strong downdraft, and that stirs up the grass pollen. The turbulence knocks tiny allergen-coated granules out of pollen, which are easily inhaled into the nose and lungs. "When they're released, they're little packs of dynamite."



*Allergic runners jog easily in rain, but not thunderstorms.*

• **Smog-Pollen Stew:** In cities, smog can power up pollen's allergenic punch. Pollen in combination with the by-products of diesel exhaust, tobacco smoke, and other airborne particles up the allergic ante. It's no surprise, then, that numerous studies now show higher rates of asthma among children who live close to major roadways.

• **Male of the Species:** In a well-intentioned move to provide a shady canopy that doesn't leave a big mess of dead flowers and seeds on street, many cities have opted to plant mostly male trees. What they spew out instead are clouds of pollen. Some enlightened cities like Albuquerque and Phoenix have since created "pollen control ordinances" that prohibit residents from planting some of the more aggravating trees, such as Cypress and Mulberry.

With so many allergy enablers floating around, it's no wonder asthma can be tricky to control during pollen season. A warning sign your asthma may be flaring in hay fever season is wheezing and shortness of breath when exercising. Also, if you keep waking up in the night short of breath, it's time to see your allergist or pulmonary specialist.

# Stay In the Know on Allergies!

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## Take Action

**In the Home:** In addition to over-the-counter remedies and prescription medication to treat symptoms, there are ways to keep pollen and its symptoms at bay.

- Keep doors and windows closed. Since the spring breeze is filled with pollen, use the air conditioner instead. Allergist Paul Keith says this is particularly important in the bedroom, since we spend a good portion of life asleep. He also suggests a HEPA-filtered portable air purifier for the room.

- Avoid hanging clean laundry outside to dry – it will collect pollen. While the dryer is harder on the energy bill, it's easier on the asthma.

- Pollen gets tracked indoors, so vacuum often with a HEPA-filtered machine, and also use a damp dusting cloth and mop, rather than sweeping.

- If you have pets that spend a lot of time outside, their fur will collect pollen. Wipe dogs and cats down, and avoid the usual cuddling in high season. Bathe your dog more often at this time.

- Wash exposed skin when you come inside, and shower before going to bed to rinse off pollen.

- Nasal rinses are another doctor-endorsed way to keep allergens at bay. Using a neti pot or a brand of saline rinse daily will help wash some pollen grains out of your nose. This also helps to relieve congestion and irritation.

- Keep windows closed in the car, too, to avoid both allergens and the powerful exhaust-pollen combination.

- If outings are giving you asthma symptoms, try keeping a symptom diary to see if there's a time of day that's best for you to go outside.

**In the Garden:** Identify the plants and trees on your property, and, at the very least, move anything you're allergic to away from house doors and windows.

- Those reactive to grass may want to consider a rock garden or stone patio as an alternative to the lawn. If you have grass, stay inside while someone else mows.

- A great guide to help you choose plants is Thomas Ogren's new book, *The Allergy-Fighting Garden*.

- If you're working in the garden, wear a molded face mask (available at hardware stores), gloves and long sleeves. Allot time to shower and change clothes.

**Medical Relief:** Non-sedating antihistamines are adequate antidotes to pollen allergens for some. They don't stop the inflammation involved with more bothersome symptoms. Nasal antihistamine sprays also aren't in the same league as steroid sprays for reducing swelling in the nose.

That's where allergist Weber says nasal steroids excel. Two nasal sprays that used to be only available by prescription are now for sale over the counter at your local pharmacy. In 2014, Nasacort Allergy 24HR became the first prescription-strength nasal spray to hit shelves. Since then, Flonase Allergy Relief also became available without a prescription.

Wallace says it's important to remember the nasal steroid sprays don't provide immediate relief. It can take two-to-four



*Showier flowers have pollen that's carried by insects and doesn't get into the airways.*

weeks to start feeling their effects. Keith adds that it's important to direct the spray away from the center of your nose to avoid nosebleeds. Nasal sprays are also a good choice if you're pregnant, in which case Weber recommends a category B steroid called Rhinocort.

Immunotherapy, commonly called allergy shots, may be the best approach for people with numerous environmental allergies that keep them from enjoying life. Although it does mean regular doctor's visits for several years, the shots can build up tolerance for numerous allergens at once.

People with grass allergy can now ask an allergist about the new sublingual immunotherapy tablets on the market. If you're a good candidate, you should begin taking Grastek or Oralair about three months ahead of grass season.

## Take Back the Day

Knowing how to dodge and counter your allergens will help take the sting out of pollen's formidable spring punch. Fortunately, science is improving knowledge and tools to assist in this effort.

It does take some weather awareness and some health-care planning, but the payoff will come as a huge improvement to your quality of life. We yearn for the warmer days, isn't it worth it to enjoy spring?