

INSIGHTS

When Pollen Attacks








Understanding fall seasonal allergies

Autumn is usually associated with richly colored leaves and bountiful harvests. But it is also a time when many plants send tiny pollen bombs into the air that can land on your face and cause itchy, red eyes and other allergic reactions. Knowing what plants are out to get you, and how to avoid allergic reactions, can make this season a more comfortable time of year for allergy sufferers.

“Sensitive Seven” plant allergens

Number one on the list of plants that cause allergic reactions is the notorious ragweed—an innocent-looking stalk of greenery capped with delicate yellow flowers. Ragweed grows wild almost everywhere, but especially on the East Coast and in the Midwest. Unfortunately, those yellow blooms release pollen from August through November, making many allergy sufferers miserable for months. But ragweed doesn't work alone. The Sensitive Seven allergens include:

Sensitive Seven

- | | |
|--|---|
|  1 Ragweed |  4 Lamb's Quarters |
|  2 Burning Bush |  5 Pigweed |
|  3 Cocklebur |  6 Sagebrush |
| |  7 Mugwort |

Climates ramp up the symptoms

Allergy seasons can be made worse by the following climate factors:



- Cool nights and warm days increase tree, grass and ragweed pollens
- Heat and high humidity provide the perfect environment for mold growth
- Morning hours are when pollen levels are at their peak
- Rain washes pollen away, but pollen counts can soar after a rainfall
- On windless days, airborne allergens concentrate where they grow
- Windy and warm days can often launch pollen into surrounding areas

Moving to another climate to avoid allergies is not the answer—allergens can be found virtually everywhere.

Tips for reducing eye irritation this fall

- Check weather websites for local pollen counts. If they're up, try to stay inside if possible
- Keep car windows closed. Autumn breezes are laced with pollen that can collect on moist eyes and irritate them
- Wear some cool shades. Sunglasses won't prevent allergies, but protective eyewear offers a simple way to keep pollen out of your eyes and help lessen the severity of itchiness or redness. If you wear contacts, make sure you are taking them out and cleaning them appropriately

If symptoms persist, ask your eye doctor for decongestant eye drops to help relieve the redness and itching.

EYE CANDY

Holding Back the Tears



Did you know that newborn babies shed no tears? That's because their tear ducts are still developing. Normally, tear ducts begin working when babies are about two weeks old, but it is not abnormal for tear production to take as long as a few months to function.

Some newborns may have clogged tear ducts, so they can make tears but the tears aren't draining properly. That can result in a gooey yellow discharge near their eyes. Your pediatrician may treat this with drops or an ointment. Your doctor may also show you how to clean your baby's eyes and massage the tear duct, if necessary. Clogged tear ducts happen to many babies off and on in the first year of life, but eventually clear up.

You might think that this delay in tearing might cause a bad case of dry eye for newborns. But not to worry—every baby is born with another type of tears—a protective eye film called basal tearing. This provides just enough moisture to keep their baby blues wet and healthy.

EYE-Q

Q: Which color can the eye see in the most shades?

See answer on back.



Myopia: Up Close



While your child is sleeping, corneal reshaping contacts gently reshape the front surface of the cornea, so he or she can see clearly the following morning when the lenses are removed.

Do you or your children have myopia? Myopia is an eye condition in which the shape of the eye changes, resulting in the ability to see close objects more clearly than those that are far away. It is commonly referred to as nearsightedness.

If you have myopia, recent studies have shown that your children are twice as likely to develop the condition. If both you and your spouse are myopic, then your child is over five times more likely to develop this eye condition versus those children whose parents' eyesight is healthy.

Genetics versus environment

About half of young adults in the U.S. have myopia, which is about double the percentage of when their grandparents were the same age. Screening children for this eye condition is important because myopia, which progresses most commonly between the ages of 7 and 16, can be treated successfully from an early age.

Interestingly, recent studies have shown that yet another factor may influence the growing rate of myopia in children. That factor is how much time children spend outdoors while growing up. In a study published in the *Journal of the American Medical Association*, researchers found that children who spent 40 minutes or more outside per day were less likely to be diagnosed with myopia.

Managing Myopia

An annual comprehensive eye exam helps screen for myopia. If your child has this condition, it can be managed by your eye-care professional. See Chart A for your management options.

CHART A: Myopia Management Options:

1 Corneal Reshaping Contact Lenses

Your child will be custom fitted with specially designed gas-permeable contact lenses, such as **Paragon CRT® Contact Lenses**, that are worn overnight. While your child is sleeping, the lenses gently reshape the front surface of the eye (the cornea) so he or she can see clearly the following morning when the contact lenses are removed.

2 Soft Bifocal Contact Lenses

Several studies show that certain soft bifocal contact lenses are helpful in managing myopia and work better than bifocal eyeglasses. Lenses fitting these criteria include **CooperVision's Biofinity® Multifocals**, **MiSight® 1-days** (currently waiting for FDA approval) and **NaturalVue® Multifocal 1-day** contact lenses.

3 0.01% Atropine Eye Drops*

Studies indicate that low-dose atropine eye drops can help slow the progression of myopia. Results with this treatment are quite encouraging. Long-term clinical studies are underway to confirm this.

Your doctor is experienced in managing myopia, so if your child is diagnosed with myopia, you may want to ask for a recommendation on which treatment is most appropriate."

* 0.01% atropine eye drops not available in all states.

** The FDA has not yet approved any contact lenses or eye drops for slowing the progression of myopia, but more studies are underway.



In the Dark about Nyctalopia?

If your eyesight fades with the light of day, you may be suffering from nyctalopia, also referred to as night blindness. Night blindness is not a disease, but can be a symptom of a vision problem.

Sometimes myopia (nearsightedness) can make it difficult to see at night or in low light. Certain cells in the eye's retina enable you to see in dim light. If they are affected by a certain disease or condition, night blindness can result.

Some causes may include:

- Nearsightedness (seeing clearly up close but not far away)
- Too little Vitamin A
- Glaucoma (a disease of the optic nerve) or glaucoma medicine that reduces the size of the pupil
- Cataracts (cloudiness on the eye's lens)
- Diabetes
- Retinitis pigmentosa (an eye disease that causes blindness)
- Keratoconus (a misshapen cornea)

If you think you have night blindness, consult your eye doctor, particularly if you have trouble driving at night or finding your way around your house in low light.



Patients with nyctalopia often have trouble driving at night.

Enhance Your Eye Color This Fall with AIR OPTIX® COLORS Lenses

Does your look ever feel incomplete? Are you looking to personalize your style to stand out from the crowd? If so, AIR OPTIX® COLORS has a simple, three-word answer for you: Play Your Way. It's time to give yourself permission to play with your eye color, enhance your look, and confidently snap a selfie this year with AIR OPTIX® COLORS contact lenses.

12 colors to try, from subtle to vibrant

Alcon's AIR OPTIX® COLORS launched its Gemstone Collection with three new colors—Amethyst, Turquoise, and True Sapphire—rounding out the portfolio to 12 unique and beautiful color contact lenses. These lenses provide a genuine and natural look that blends with any eye color because of its 3-in-1 color technology—the outer ring defines the eye, the primary color transforms the eye colors, and the inner ring brightens and adds depth. They are also designed to enhance dark or light eyes, and are available with or without vision correction.

Play with your eye color, virtually

If you're curious about playing with your eye color, but not sure which hue is right for you, the AIR OPTIX® COLORS Color Studio allows you to virtually try on each color and experiment with a new look. You can also find the eye color that best matches your personality by answering a few fun questions from the online personality test available on AIROPTIXCOLORS.com. Once you've found your perfect color match, you can receive a free in-office trial* of AIR OPTIX® COLORS.

A beautiful enhancement that also provides comfort

AIR OPTIX® COLORS lenses deliver outstanding comfort and breathability and feature SmartShield® Technology,

which helps maintain moisture on the lens and protects it from irritating deposits. The lenses are highly breathable for white, healthy-looking eyes.

Ask your Optometrist today

For current AIR OPTIX® AQUA or AIR OPTIX® plus HydraGlyde® lens patients, there is no additional refit required for AIR OPTIX® COLORS. If you've never worn AIR OPTIX® contact lenses before, ask your eye doctor if these lenses might be right for you. If you do not have an eye doctor, you can find one near you through AIROPTIXCOLORS.com. Whether you're looking to boost your selfie confidence, spice up your evening ensemble, or personalize your style on a busy schedule, AIR OPTIX® COLORS has an option for you. You can also try out the AIR OPTIX® COLORS convenient 2-count pack.

*Eye exam may be required before lens trial. Professional fees may apply. One pair of non-corrective AIR OPTIX® COLORS contact lenses for wear in-office only. Offer available at participating offices.

Important Safety Information:

For daily wear only for near/far-sightedness. Contact lenses, even if worn for cosmetic reasons, are prescription medical devices that must only be worn under the prescription, direction and supervision of an eye-care professional. Serious eye-health problems may occur as a result of sharing contact lenses. Although rare, serious eye problems can develop while wearing contact lenses. Side effects like discomfort, mild burning or stinging may occur. To help avoid these problems, follow the wear and replacement schedule and the lens care instructions provided by your eye doctor.

Rx only Ask your eye-care professional for complete wear, care and safety information.



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Choose Chia Seeds

More than 3500 years ago, the Aztecs grew chia seeds because small amounts of this tiny seed could sustain warriors on the march. After being banned during the Spanish Conquest in the 16th century because the seeds were being used in non-Christian religious rituals, they fell out of cultivation. Today, it is a popular crop in Mexico because of its many health benefits.

Chia seeds are richer in omega-3 fatty acids than flax seeds, and unlike flax seeds, they do not have to be ground for nutrients to be absorbed. High omega-3 fatty acid content helps to maintain a moist ocular surface, which can help dry eye conditions.

Chia seeds are also:

- Loaded with antioxidants
- Store for long periods without becoming rancid
- Rich in fiber (25 grams give you 6.9 grams of fiber)
- Plentiful in calcium, phosphorus, magnesium, manganese, copper, iron, molybdenum, niacin and zinc
- Helpful in slowing the breakdown of carbohydrates and the rate at which they are converted into sugar

Chia seeds have a nutlike flavor. They can be sprinkled—ground or whole—on cereal, in yogurt or on salads. They can also be ground and mixed with flour when making muffins or other baked goods.

Nature Vs. Suture: Cosmetic Eye Procedures



In the pursuit of beauty or extended youth, many people opt for cosmetic procedures around or near their eyes. One popular procedure is called the eye lift (blepharoplasty).

What is blepharoplasty?

Droopy eyelids are often associated with aging and can make a person look tired. Eyelid surgery (blepharoplasty) removes and tightens excess eyelid skin, offering a more alert and youthful appearance. Sometimes blepharoplasty can improve vision by providing a less obstructed field of view. This procedure can be performed on upper and/or lower eyelids. An upper eyelid blepharoplasty (sometimes called an “eye lift”) can raise an upper eyelid margin slightly if the heaviness of the excessive skin is “weighing down” the upper eyelid, causing it to droop.

Upper and sometimes lower eyelids may become droopy or baggy as part of the aging process. Eyebrows also may sag or droop. This may be hereditary.

Ophthalmologists and oculoplastic surgeons most commonly perform blepharoplasty. But this procedure can also be done by general plastic surgeons; ear, nose and throat surgeons; and oral and maxillofacial surgeons.

Who are the best candidates?

Before considering blepharoplasty, see your eye doctor to evaluate any medical problems related to your eyelids. You will be assessed for possible surgical risk factors such as dry-eye problems, thyroid eye disease and diabetes. Keep in mind that the severity and any number of health problems might eliminate you as a candidate for

blepharoplasty. If you are a smoker, your surgeon may advise you to quit smoking for at least several weeks prior to having the procedure.

A potential complication of eyelid surgery is a temporary inability to close your eyelids completely. As a result, your eyes may become abnormally dry. Usually this condition resolves after a few weeks or months. During this time, your doctor may recommend remedies such as eye drops, humidifiers and even taping the eyes closed at night to help provide lubrication. Some surgeons may suggest that you massage your eyelids a couple of weeks after the stitches have been removed, to soften the remaining skin and allow better closure of your eyelids.

What can you expect?

If you choose blepharoplasty strictly for cosmetic reasons, then your doctor will tell you what to expect from the procedure. While it can sometimes dramatically improve appearance, the aging process will continue. Depending on your health and other factors, a blepharoplasty can last as long as 10 years.



What Is the Ciliary Body?

Just behind the eye’s iris is a circular structure called the ciliary body. It has two parts—the ciliary processes and the ciliary muscle.

The ciliary processes are folds of tissue that attach to the lens and produce the watery fluid that carries nutrients to the eye and helps maintain inner eye pressure.

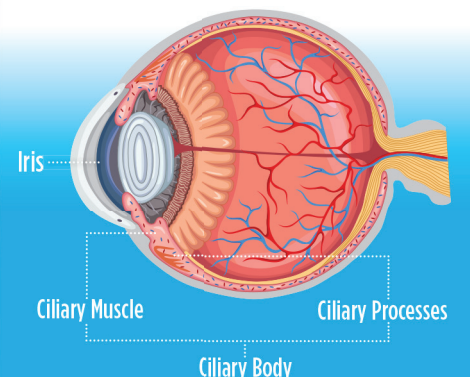
The ciliary muscle, which sits around the lens, helps your eye focus by relaxing or contracting. These movements adjust the thickness and curvature of the lens. When the ciliary muscle is relaxed, the lens is flat and focuses on distant objects. When it contracts, the eye can view closer objects.

A healthy young adult can focus on objects about six inches from the eye. Closer objects appear blurred. The term for this minimum distance of sharp focus is called the Near Point of the eye.

The Near Point for a 10-year-old child is a little under three inches, but by the age of 40, the Near Point is more than eight inches. By the age of 60, the Near Point can increase to about 39 inches. This age-related decrease in the eye’s ability to focus close up is called presbyopia and can be corrected with bifocals or a pair of reading glasses.

Body Language

Just behind the eye’s iris is a circular structure called the ciliary body which has two parts—the ciliary processes and the ciliary muscle.



Are You Being Framed by Cheap Eyewear?



Buying cheap eyewear can come with a hidden price. While sellers may claim they are offering the same quality product at lower prices, there are big differences in scratch resistance, lens coatings and the quality and durability of lens materials and brands.

Manufacturing differences

Many online retailers can cut corners by producing lenses themselves rather than using the specialized wholesale optical laboratories that serve eye-care professionals. Cheap eyeglass frames are often made of low-grade materials that can cause skin irritations. Cheap metal frames sometimes contain nickel alloys that can both irritate and discolor skin. In the past, cheap frames have been recalled because they contained toxic substances.

Misleading choices

Online retailers feature vast virtual inventories of frames. While optical stores may not match their range of choices, they do stock reliable brands and can recommend which ones offer the best fit for your head and face. Virtual try-on features do not offer a chance to determine if those glasses are comfortable and custom-fitted. When you finally receive the frames in the mail, they might look larger or smaller than what you saw on screen and the color may differ.

To UV or not UV

The lens color and the darkness of sunglasses do not determine how well your eyes are protected from harmful UV rays. Cheap sunglasses, even if they are labeled “polarized” or “100% UV protection,” may have lower-quality lenses that allow harmful violet and blue light to penetrate the eye and potentially cause damage over time.

Read it and weep

Cheap reading glasses sold in discount stores can often cause eye strain if the wrong power is chosen. Optical quality of cheap reading glasses typically is not as good as a customized pair of glasses for computer use and reading. They also may not provide protection from the blue light that comes from electronic devices like your mobile phone or laptop.

Protect your eyes

A knowledgeable optician can ensure that your eyes receive the best quality eyewear using the latest advances in technology. New technologies include photochromic lenses, progressive lenses, computer glasses, anti-reflective coating and impact-resistant (polycarbonate) lenses. Eyeglasses are an important investment. Warranties on eyeglasses and sunglasses are only as good as the reliability of the seller providing them. Online sellers and mall kiosks may come and go, but it’s important to support your trusted community optometrist when purchasing eyewear.

You Get What You Pay For

Cheap reading glasses sold in discount stores or online can cause eye strain if the wrong power is chosen.



Corneal Ulcers

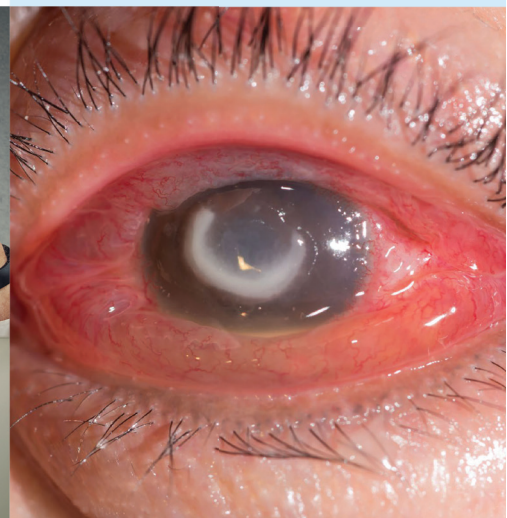
The clear, dome-shaped window on the front of your eye is called the cornea. It focuses light coming into your pupil so you can see a sharp image. When an open sore develops on the cornea, it is called a corneal ulcer. Causes of corneal ulcers include eye infection, severe dry eye or other eye disorders. Eye symptoms include:

- Redness
- Severe pain and soreness
- Feeling like something is in the eye
- Tearing
- Pus or other discharge
- Blurred vision
- Sensitivity to light
- Swollen eyelids
- White spot on the cornea

Contact lens wearers may be at risk of developing corneal ulcers. Safe handling, storage and cleaning of lenses are key steps to reduce the risk. Others at risk include people who:

- Have had cold sores, chicken pox or shingles
- Use steroid eye drops
- Have dry-eye syndrome
- Have eyelid disorders that prevent proper functioning of the eyelid

Contact your eye doctor immediately if you think you have a corneal ulcer. It can permanently damage your vision and even cause blindness if left untreated.





Dr. Steven Warstadt
Guest Optometrist
Atlanta, GA

Q: Every fall my allergies act up and my eyes feel miserable. How can I get some relief?

A: You're not alone. One out of five Americans has allergies, and half of allergy sufferers have itchy eyes. Here's how to determine if your symptoms are caused by allergies: If your eyes are red and itchy, you likely have allergies. If your eyes are burning, you might have dry eye. If you wake up with gooey eyes, you may have a bacterial or viral infection.

Fall allergies are associated with hay fever. The best thing you can do when high amounts of pollen are in the air is to avoid the problem if possible. That means staying indoors, closing the windows and turning the air conditioning on. Change air conditioner filters monthly if possible. If you have to go outdoors, wear a hat and sunglasses to avoid pollen blowing into your eyes. When you return home, change and wash your clothes. Keep your eyes flushed out with eyewashes and artificial teardrops.

For the itchiness, you can use cold compresses—either a washcloth with cold water or wrapped around a cold pack. Don't use a cold pack directly on your skin. If a cold compress doesn't offer itch relief, choose your over-the-counter eye drops carefully, avoiding the brands that reduce eye redness. They may initially do that, but then your eyes will get worse. Instead, look for antihistamine eye drops that are made

with ketotifen, found in many brands. Consider avoiding antihistamine pills and capsules, if you can, because they can cause drowsiness and dry eyes.

If your allergies are severe, and over-the-counter eye drops don't work, your eye doctor may prescribe a mast-cell stabilizer. This medication prevents mast cells from releasing the histamines that make your eyes itch. If you require something stronger, some doctors might prescribe steroid medications. This should be for extreme cases, and only for short amounts of time.

Special care for contact lens wearers during allergy season

If you wear contact lenses, opt for daily disposable lenses to reduce the amount of pollen in your eye. If your allergies are severe, discontinue contact lens use until the worst of the allergy season is over. Make sure you have a backup pair of eyeglasses for those times.

Hopefully, with all of these precautions and treatments at your disposal, you will be able to comfortably get through the allergy season.

Wash Away Pollen

If you have to go outside when pollen counts are high, take off your clothes as soon as you go inside and place them in the washing machine.



Why Do Geckos Lick Their Eyes?



Most people know about geckos from insurance commercials. They're charming, green and speak with a Cockney British accent. Real geckos may be less verbal, and come in an assortment of colors and patterns, but they are still awfully cute. There are two types of geckos—those with eyelids and those without.

The latter group—without the eyelids—has an unusual way of keeping their eyes clean and moist. Instead of eyelids, their eyeballs are covered with spectacles—transparent scales that protect the eyes. These geckos clean their eyes by using their tongues like windshield wipers. They also moisten them that way.

Most geckos have large bulging eyes—some are intricately patterned and flecked with metallic hues. It's thought that the metallic effect helps camouflage them. Vertical pupils offer additional eye protection, while basking in the sun. They close to tiny slits and block damaging rays. In some species, geckos have pupils with overlapping edges that close completely. They see through tiny pinholes formed by the scalloped shape at the edges of the pupil.

Answer to Eye-Q (from page 1)

A: Green. A common color in nature, the eye has adapted to seeing it in more shades.

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