GLAUCOMA

Glaucoma is a group of eye conditions resulting in optic nerve damage. Frequently caused by increased intraocular pressure within the eye, it can cause vision loss, from a slight loss to blindness. It is the leading cause of blindness in the United States.

Aqueous humor is the fluid that normally flows in and out of the eye through a drainage system where the cornea and iris meet. If the system functions improperly pressure builds within the eye and the optic nerves can become enlarged.

The most common type of glaucoma is open-angle glaucoma. Generally there are no symptoms until vision is significantly impaired. There is a gradual loss of peripheral vision, normally in both eyes, and tunnel vision in the advanced stages. Loss of peripheral (side) vision, headaches, tearing or blurred vision may also occur.

Symptoms of angle-closure glaucoma (closed angle glaucoma) include severe headache or eye pain with severe nausea and vomiting, sudden onset of visual disturbances, often in low light, blurred or loss of vision, halos, reddening of the eye, and dilated pupils. This is an emergency situation and immediate care by an ophthalmologist or at the emergency room is indicated to have fluid removed from the eye.

Those individuals who have normal-tension glaucoma have damaged optic nerves but eye pressures remain normal.

Elevated intraocular pressure does not always cause this disease but it is a risk factor. Other risk factors include: family history; diabetes; heart disease; hypertension; and hypothyroidism. Age is factor for individuals over 60 and African-Americans over 40. Those of Asian descent are at increased risk of developing acute angle-closure glaucoma and those of Japanese descent may be more likely to have normal-tension glaucoma. Eye injuries, tumors, retinal detachment, inflammation of the eye and some eye surgeries may trigger glaucoma. Being near-sighted or farsighted may also increase one’s risk.

An eye doctor measures for intraocular pressure using a machine called a tonometer. This procedure only takes a few seconds. Normal pressures range from 10-21 millimeters of mercury (mm Hg). The doctor may also dilate the eyes in order to examine the optic nerves. Distance vision may be checked and cornea thickness measured.

An elevated pressure does not always indicate glaucoma if the optic nerves are not enlarged. Increased pressure without optic nerve damage is called ocular hypertension and is monitored by the eye doctor at regular intervals, as are those who have enlarged optic nerves and are diagnosed as “glaucoma suspect”.

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There is no cure for glaucoma but treatment may slow progression and prevent blindness. A visual field test can be performed to test for loss of peripheral vision by having the patient look into a machine and click a button whenever a small light appears. Visual fields and eye pressures are normally ordered every 6-9 months. There are also photographs that can be taken of the optic nerves that enable the physician to monitor any progression of optic nerve enlargement. As long as pressures remain within normal range, no treatment may be necessary. A simple laser surgery (trabeculoplasty) may be performed to open clogged drainage canals and help fluid to drain. This procedure can be effective for years, may be repeated if necessary, and may make the use of drops unnecessary. Eye surgery can also be performed if other treatments are ineffective.

Medications Used to Treat Glaucoma

- When necessary, eye drops, (i.e., Lumigan, Xalatan, prostaglandins) are prescribed to help keep pressures within normal range by increasing the outflow of the aqueous humor and reducing eye pressure.
- Beta blockers (i.e, Timoptic and Betoptic) reduce the production of fluid in the eye.
- Alpha-adrenergic agonists medications (i.e., Alphagan and lopidine) also reduce fluid production and increase the outflow.
- Carbonic anhydrase inhibitors (i.e., Azopt and Diamox) are oral medications that can be prescribed if drops are ineffective or unable to be tolerated.

Medication Side Effects

Some of these medications are absorbed into the blood stream and may produce side effects. It is important to be aware of potential side effects and observe the individual closely for any that may be present.

- Prostaglandins may cause blurred vision, reddening and stinging of the eye, darkening of the iris and changes in the pigment of the skin of the eyelid.
- Beta-blockers can aggravate lung conditions, cause fatigue, slowed heart rate and hypotension.
- Alpha-adrenergic agonists can cause irregular heartbeat, hypertension, fatigue, dry mouth, and red, itchy or swollen eyes.
- Carbonic anhydrase inhibitors side effects include frequent urination, kidney stones, depression, fatigue, metallic taste, loss of appetite, weight loss, and tingling sensation in fingers and toes.

Maintaining good health habits is especially important if pressures are elevated. Healthy eating, regular exercise and limiting caffeine are good practices. Drinking moderate amounts of fluids at one time is recommended as a quart or more within a short period of time may temporarily increase eye pressure. Regular eye care, following treatment orders and protecting eyes from injury and the sun are important practices.

The American Academy of Ophthalmology recommends comprehensive eye exams for everyone beginning at age 40 and then every 3-5 years if no risk factors. After age 60, or if risk factors are present, screening is recommended every 1-2 years. Those who are African-American are at higher risk and the PCP may begin periodic examinations between 20 and 30 years of age. Unless the intraocular pressure is measured by an ophthalmologist or optometrist there is no way to know if treatment is needed.

**OUTDOOR SAFETY**

**Summer is here and that means it's a good time to go outside and enjoy the weather.**

The return of warmer temperatures brings the opportunity for freedom, relaxation, exploration, and being closer to nature. Whether you’re relaxing in the backyard, turning up your garden, hitting the pool, or exploring the great outdoors, here are some ways to help keep you and your family healthy this spring and summer.

**Beware of Bugs**

Warmer temperatures aren’t just attractive to people, but to mosquitoes, ticks, and fleas. Mosquitoes can transmit West Nile virus, St. Louis encephalitis virus, eastern equine encephalitis virus and even dengue. Ticks can transmit Lyme disease and other serious infections, and fleas can transmit the plague.

To prevent these illnesses, use an appropriate insect and tick repellent and apply it properly. Prime mosquito-biting hours are usually from dusk to dawn, but ticks are out at all times. Young ticks are so small that they can be difficult to see, and both young and adult ticks hungrily look to animals, and sometimes people, to bite.

To keep ticks at a distance, avoid tick-infested areas (especially places with leaf-litter and high grasses) and use repellent containing 20% DEET. If it’s primarily mosquitoes that are the problem, CDC recommends repelling them with products that contain DEET, picaridin, IR3535 or oil of lemon eucalyptus. You can also treat clothing with or purchase clothing that is pre-treated with Permethrin. This common synthetic chemical, widely used as an insecticide, acaricide, and insect repellent, can protect through several washings. Be sure to always follow the directions on the repellent packaging.

After coming indoors, shower as soon as possible and check your body for ticks. Make sure that your children also bathe or shower and get checked for ticks. Wash and tumble dry your clothing and check your pets for ticks. If you find an attached tick, don’t panic, ticks are easy to remove with a pair of fine-tipped tweezers. Consult your healthcare provider if you develop a rash, fever, body aches, fatigue or headache, stiff neck, disorientation in the 1-3 weeks following a bite. These symptoms may be caused by any number of illnesses. Pesticides, vegetation-free play areas, and landscaping techniques for tick-free zones can also help limit your exposure to ticks and other insects.

**Healthy Pets, Healthy People**

While you’re outside enjoying the weather, remember to protect your pets, too! Keeping healthy pets will help keep you and your family healthy. Children can get roundworm and hookworm from soil contaminated by pet feces (stool), so make sure that puppies and kittens are seen regularly by a veterinarian and dewormed. Protect family pets from ticks and fleas by keeping them on a flea and tick control program, and talk to your veterinarian for advice on the appropriate anti-bug products to use on your pet.

**Dining Al Fresco**

Nothing says summer like the smoky flavor of foods cooked out on the grill. When grilling, use a meat thermometer to make sure that you cook meat and poultry thoroughly. Ground beef should be cooked to an internal temperature of 160°F in order to kill germs found in raw and undercooked meat. Also, put cooked meat on a clean platter, rather than back on the one that held the raw meat, to avoid cross-contamination. Wash hands, kitchen work surfaces, and utensils with soap and water immediately after they have been in contact with raw meat or poultry.

Whether you’re cooking out in the backyard or on a picnic, always keep cold foods cold and hot foods hot. When you’re finished eating, refrigerate leftovers promptly. For downloadable tips, see Safe Food Handling: Seven Super Steps to Safe Food In the Summer on FightBAC.org.
AROUND THE YARD

It is now time to seal up, trap up, and clean up to prevent rodent infestation. As you’re clearing out clutter, fill any gaps or holes inside and outside your home. Eliminate or seal rodent food sources such as pet food, bird feeders, and garbage cans. Elevate hay, woodpiles, and garbage cans at least 1 foot off the ground, and trim grass and shrubbery within 100 feet of your home.

Mosquitoes can breed in just days, so remove any items that may collect standing water, such as buckets, old tires, and toys. You can reduce the number of ticks around your home by removing leaf litter, brush and woodpiles around your house and at the edge of your yard. By clearing trees and brush in your yard, you can reduce the likelihood that deer, rodents, and ticks will live there. Replace or repair torn window screens to keep bugs out of the house.

Gardening is a great outdoor activity for people of all ages. Stay safe and healthy as you grab your tools and head outside. Wear gloves, use safety gear when handling equipment and chemicals, protect yourself from the sun, and use insect repellent. Also watch out for extreme heat and know your limitations.

Do not allow children to play in areas that are soiled with pet or other animal stool. Cover sandboxes when not in use to make sure that animals do not get inside and contaminate them with parasites that can cause diseases.

Pollens and air pollutants can be triggers for allergic reactions, like nasal and sinus allergies and hives, and asthma can cause recurrent symptoms such as wheezing, chest tightness, shortness of breath and coughing. Stay healthy by properly taking prescription or over-the-counter allergy medicine and having and following an asthma action plan.

Wearing a protective nose and mouth mask, or even sunglasses or protective eyewear, while doing yard work could help to avoid the triggers that cause allergy and asthma complications.

F UN IN THE SUN

Protect yourself and your family from recreational water illnesses (illnesses caused by germs or chemicals in recreational water) by doing your part to keep germs out of the pool. Do not swim when you have diarrhea, don’t swallow pool water, take a shower before swimming, and wash your hands after using the toilet or changing diapers. Keeping germs out of the pool means a healthier swimming experience for everyone.

Prevent skin cancer. Avoid being outdoors during the midday if the sun is intense, use sunscreen with at least SPF 15, cover up with clothing, wear a brimmed hat, and wear sunglasses that block UVA and UVB rays. Be aware of the signs of heat stress.

I N THE GREAT OUTDOORS

When you’re out on the trail, whether hiking, camping, or hunting, protect yourself from mosquitoes and other bugs by using insect/tick repellent. Check your clothes and body for ticks daily. If you find any ticks, carefully remove them with tweezers. The ticks that transmit Lyme disease are most active in May, June, and July, but check for ticks in all warm months to protect yourself against all tick-borne diseases.

Just because a stream's water looks clear, it doesn’t mean it’s safe. Giardia and Cryptosporidium are two parasites that you can’t see, but they can make you very sick, so follow healthy swimming tips and always treat or filter water to make it safe to drink.

Bats are fun to watch as they flutter around at dusk, sometimes, bats may be infected with rabies and may pose a risk for exposure to humans. Never touch a bat! If you are bitten by a bat, wash the affected area thoroughly and get medical advice immediately. Whenever possible, the bat should be captured and sent to a laboratory for rabies testing.

Enjoy the great outdoors.
Have a safe and healthy summer!
**TIPS FOR PREVENTION**

- Drink more fluids (non-alcoholic), regardless of your activity level. Don’t wait until you’re thirsty to drink. *Warning: If your doctor generally limits the amount of fluid you drink or has you on water pills, ask him how much you should drink while the weather is hot.*

- Don’t drink liquids that contain alcohol or large amounts of sugar. These drinks actually cause you to *lose* more body fluid. Also, avoid very cold drinks, because they may cause stomach cramps.

- Stay indoors and, if at all possible, stay in an air-conditioned place. If your home does not have air conditioning, go to the shopping mall or public library—even a few hours spent in air conditioning can help your body stay cooler when you go back into the heat. Call your local health department to see if there are any heat-relief shelters in your area.

- Electric fans may provide comfort, but when the temperature is in the high 90s, fans will not prevent heat-related illness. Taking a cool shower or bath, or moving to an air-conditioned place is a much better way to cool off.

- Wear lightweight, light-colored, loose-fitting clothing.

- **NEVER** leave any person or animal in a closed, parked vehicle!

**Although any one at any time can suffer from heat-related illness, some people are at greater risk than others.**

**Check regularly on:**

- Infants and young children
- People aged 65 or older
- People who have a mental illness
- Those who are physically ill, especially with heart disease or high blood pressure
- Visit adults at risk at least twice a day and closely watch them for signs of heat exhaustion or heat stroke. Infants and young children, of course, need much more frequent watching.

**If you must be out in the heat:**

- Limit your outdoor activity to morning and evening hours.

- Cut down on exercise. If you exercise outdoors, drink two to four glasses of cool, non-alcoholic fluids each hour. Sports drink may replenish salt and minerals you lose to sweat, however, if you are on a low-salt diet check with your doctor before using them. Remember to limit your activity to morning and evening hours.

- Try to rest often in shady areas.

- Protect yourself from the sun’s rays by wearing a wide-brimmed hat, sunglasses and sunscreen of SPF 15 or higher (the most effective products say “broad spectrum” or “UVA/UVB protection” on their labels).

**Links to Check Out**

- www.emedicine.com
- www.mayoclinic.com
- health.allrefer.com
- www.webmd.com
- www.cdc.gov
- www.fda.gov
- www.mayoclinic.com/health/poison-ivy/SN00022
- www.foodsafety.gov

**NEW Media Center**

The new Media Center located at the Advocacy Alliance, 841 Jefferson Avenue, Scranton, will promote collaboration between the community and the Advocacy Alliance.

This center will offer programs to support a variety of educational needs that the community may have.
**Sun-Sensitizing Drugs**

Sun-sensitizing drugs are drugs that have side effects when people taking them are exposed to the sun. Some reactions are caused by exposure to the sun's UVB, or "short" wave, but most are caused by UVA, or "long" wave, exposure.

There are two main types of sun-sensitizing drug reactions. They are:

**Photo allergy** occurs when skin is exposed to the sun after certain medicines or compounds are applied to the skin's surface. The ultraviolet (UV) light of the sun causes a structural change in the drug, and this, in turn, causes the production of antibodies that are responsible for the sun-sensitivity reaction. An eczema-type rash often occurs a few days after sun exposure, and the rash can spread to parts of the body that were not exposed to the sun.

**Photo toxicity** is the most common type of sun-sensitivity drug reaction. It can occur when skin is exposed to the sun after certain medications are injected, taken orally, or applied to the skin. The drug absorbs the UV light, then releases it into the skin, causing cell death. Within a few days, symptoms appear on the exposed areas of the body. In some people, symptoms can persist up to 20 years after the medication is stopped. Among the most common photosensitizing drugs are the tetracycline family, NSAIDs, non-steroidal anti-inflammatory drugs (i.e., ibuprofen), and amiodarone (i.e., Cordarone, a heart medication).

It’s important to note that not every person who uses these drugs has a reaction. If it does happen, it can be a one-time occurrence, or it can happen each time the drug is taken and sun exposure occurs. People with HIV are among the most likely group to experience sun sensitivity to drugs.

Sun-sensitizing drugs can aggravate existing skin conditions, including eczema and herpes, and may inflame scar tissue. Sun exposure can also worsen or even precipitate autoimmune disorders, such as lupus.

**Can sunscreen help?** Absolutely. It will lessen the impact of sun exposure. But some ingredients in sunscreens are potentially photosensitizing, so in rare circumstances, it could worsen symptoms.

There are dozens of medications and over-the-counter drugs that can cause sun sensitivity. Some of the most common include:

- Antibiotics (i.e., Doxycycline, tetracycline, ciprofloxacin, ofloxacin, levofloxacin, trimethoprim)
- Antidepressants (i.e., doxepin (Sinequan); and other tricyclics; St. John’s Wort)
- Antihistamine (i.e., promethazine, diphenhydramine)
- Benzoyl peroxide
- Nonsteroidal anti-inflammatories (i.e., ibuprofen, ketoprofen, naproxen, celecoxib, piroxicam)
- Diuretics (i.e., urosemide, bumetanide, hydrochlorothiazide)
- Antihypertensives (blood pressure drugs) (i.e., Aldactazide, Capozide, Cardizem, diltiazem)
- Benzocaine
- Cholesterol drugs (i.e., simvastatin, atorvastatin, lovastatin)
- Retinoids (i.e., Isotretinoin, acitretin)
- Hypoglycemics (i.e., glipizide, glyburide)
- PDT Pro photosensitizers (i.e., 5-aminolevulinic acid, methyl-5-aminolevulinic acid)
- Neuroleptic drugs (i.e., Chlorpromazine, fluphenazine, , perphenazine, thioridazine, thiothixene)
- Anti-fungal (i.e., griseofulvin)
- Sulfonamides (i.e., sulfadiazine, , sulfamethoxazole, sulfasalazine, sulfinpyrazone)
- Other drugs (i.e., Para-aminobenzoic acid (PABA), 5-FU, quinidine, dapsone)
**Makeover Creamy Italian Sausage Pasta Recipe**

8 ounces uncooked spiral pasta  
3/4 pound turkey Italian sausage links, casings removed  
3/4 cup chopped sweet red pepper  
1/2 cup chopped onion  
1 tablespoon all-purpose flour  
1 cup fat-free half-and-half  
1 cup milk  
1/2 cup white wine or chicken broth  
1/2 cup grated Romano cheese

1/4 teaspoon salt  
1/4 teaspoon pepper  
1/8 teaspoon paprika  
1 tablespoon minced fresh parsley

**Directions**

Cook pasta according to package directions. Meanwhile, in a large nonstick skillet, cook the sausage, red pepper and onion over medium heat until sausage is no longer pink and vegetables are tender; drain and return to the pan.

In a small bowl, combine the flour, half-and-half, milk, wine or chicken broth, cheese, salt, pepper and paprika until blended. Add to the sausage mixture. Bring to a boil; cook and stir for 1 minute or until thickened. Remove from the heat.

Drain pasta. In a large bowl, combine sausage mixture and pasta. Before serving, sprinkle with parsley. **Yield:** 6 servings.

**Traditional Nutritional Analysis:** One serving (1 cup) equals 697 calories, 54 g fat (27 g saturated fat), 163 mg cholesterol, 754 mg sodium, 34 g carbohydrate, 2 g fiber, 18 g protein.

**Make Over Nutritional Analysis:** One serving (1 cup) equals 343 calories, 11 g fat (4 g saturated fat), 61 mg cholesterol, 600 mg sodium, 38 g carbohydrate, 2 g fiber, 21 g protein. **Diabetic Exchanges:** 2 starch, 2 lean meat, 1 fat, 1/2 reduced-fat milk.

**Makeover Dirt Dessert Recipe**

1 package (8 ounces) fat-free cream cheese  
1 package (3 ounces) Philadelphia® Cream Cheese, softened  
3/4 cup confectioners’ sugar  
3-1/2 cups cold fat-free milk  
2 packages (1 ounce each) sugar-free instant vanilla pudding mix  
1 carton (12 ounces) frozen reduced-fat whipped topping, thawed  
1 package (15-1/2 ounces) reduced-fat Oreo cookies, crushed

**Directions**

In a large bowl, beat cream cheeses and confectioners’ sugar until smooth. In a large bowl, whisk milk and pudding mixes for 2 minutes; let stand for 2 minutes or until soft-set. Gradually stir into cream cheese mixture. Fold in whipped topping.

Spread 1-1/3 cups of crushed cookies into an ungreased 13-in. x 9-in. dish. Layer with half of the pudding mixture and half of the remaining cookies. Repeat layers. Refrigerate for at least 1 hour before serving. **Yield:** 20 servings.

**Makeover Nutritional Facts:** 1/2 cup equals 208 calories, 6 g fat (4 g saturated fat), 6 mg cholesterol, 364 mg sodium, 33 g carbohydrate, 1 g fiber, 5 g protein. **Diabetic Exchanges:** 2 starch, 1 fat.

**Traditional Nutritional Facts:** 1/2 cup equals 317 calories, 16 g fat (8 g saturated fat), 18 mg cholesterol, 387 mg sodium, 39 g carbohydrate, 1 g fiber, 4 g protein.
IDEAS FOR OUR NEWSLETTER?

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