

Children's Eye Health

January is eye care/vision month. Here is some information to best care for your eyes.

Remember, cold and flu season is upon us, please stay home if you are ill and good handwashing is the best defense against infection. It is not too late to get a flu shot - contact your school nurse, medical provider, or the health department for more information.

FAST FACTS:

Approximately 6.8% of children younger than 18 years in the United States have a diagnosed eye and vision condition.

Approximately 14 million individuals aged 12 years and older have visual impairment, among which more than 80% could be corrected to good vision with refractive correction.

In 2001, about 2 million Americans sustained eye injuries that required medical attention.

COMMON EYE DISORDERS:

Refractive Errors

Refractive errors are the most frequent eye problems in the United States. Refractive errors include myopia (near-sightedness), hyperopia (farsightedness), astigmatism (distorted vision at all distances), and presbyopia that occurs between age 40-50 years (loss of the ability to focus up close, inability to read letters of the phone book, need to hold newspaper farther away to see clearly) can be corrected by eyeglasses, contact lenses, or in some cases surgery. Recent studies conducted by the National Eye Institute showed that proper refractive correction could improve vision among 11 million Americans 12 years and older.

Amblyopia

Amblyopia, also referred to as "lazy eye," is the most common cause of vision impairment in children. Amblyopia is the medical term used when the vision in one of the eyes is reduced because the eye and the brain are not working together properly. The eye itself looks normal, but it is not being used normally because the brain is favoring the other eye. Conditions leading to amblyopia include; strabismus, an imbalance in the positioning of the two eyes; more nearsighted, farsighted, or astigmatic in one eye than the other eye, and rarely other eye conditions such as cataract.

Unless it is successfully treated in early childhood, amblyopia usually persists into adulthood, and is the most common cause of permanent one-eye vision impairment among children and young and middle-aged adults. An estimated 2%–3% of the population suffers from amblyopia.

Strabismus

Strabismus involves an imbalance in the positioning of the two eyes. Strabismus can cause the eyes to cross in (esotropia) or turn out (exotropia). Strabismus is caused by a lack of coordination between the eyes. As a result, the eyes look in different directions and do not focus simultaneously on a single point. In most cases of strabismus in children, the cause is unknown. In more than half of these cases, the problem is present at or shortly after birth (congenital strabismus). When the two eyes fail to focus on the

same image, there is reduced or absent depth perception and the brain may learn to ignore the input from one eye, causing permanent vision loss in that eye (one type of amblyopia).

SIMPLE TIPS FOR HEALTHY EYES

Your eyes are an important part of your health. You can do many things to keep them healthy and make sure you're seeing your best. Follow these simple guidelines for maintaining healthy eyes well into your golden years.

Have a comprehensive dilated eye exam. You might think your vision is fine or that your eyes are healthy, but visiting your eye care professional for a comprehensive dilated eye exam is the only way to really be sure. When it comes to common vision problems, some people don't realize they could see better with glasses or contact lenses. In addition, many common eye diseases, such as glaucoma, diabetic eye disease, and age-related macular degeneration, often have no warning signs. A dilated eye exam is the only way to detect these diseases in their early stages. During a comprehensive dilated eye exam, your eye care professional places drops in your eyes to dilate, or widen, the pupil to allow more light to enter the eye—the same way an open door lets more light into a dark room. This process enables your eye care professional to get a good look at the back of the eyes and examine them for any signs of damage or disease. Your eye care professional is the only one who can determine if your eyes are healthy and if you're seeing your best.

Know your family's eye health history. Talk to your family members about their eye health history. It's important to know if anyone has been diagnosed with an eye disease or condition, since many are hereditary. This information will help to determine if you're at higher risk for developing an eye disease or condition.

Eat right to protect your sight. You've heard that carrots are good for your eyes. But eating a diet rich in fruits and vegetables—particularly dark leafy greens, such as spinach, kale, or collard greens—is important for keeping your eyes healthy, too.ⁱ Research has also shown there are eye health benefits from eating fish high in omega-3 fatty acids, such as salmon, tuna, and halibut.

Maintain a healthy weight. Being overweight or obese increases your risk of developing diabetes and other systemic conditions, which can lead to vision loss, such as diabetic eye disease or glaucoma. If you're having trouble maintaining a healthy weight, talk to your doctor.

Wear protective eyewear. Wear protective eyewear when playing sports or doing activities around the home. Protective eyewear includes safety glasses and goggles, safety shields, and eye guards specially designed to provide the correct protection for the activity in which you're engaged. Most protective eyewear lenses are made of polycarbonate, which is 10 times stronger than other plastics. Many eye care providers sell protective eyewear, as do some sporting goods stores.

Quit smoking or never start. Smoking is as bad for your eyes as it is for the rest of your body. Research has linked smoking to an increased risk of developing age-related macular degeneration, cataract, and optic nerve damage, all of which can lead to blindness.^{ii, iii}

Be cool and wear your shades. Sunglasses are a great fashion accessory, but their most important job is to protect your eyes from the sun's ultraviolet rays. When purchasing sunglasses, look for ones that block out 99 to 100 percent of both UV-A and UV-B radiation.

Give your eyes a rest. If you spend a lot of time at the computer or focusing on any one thing, you sometimes forget to blink and your eyes can get fatigued. Try the 20-20-20 rule: Every 20 minutes, look away about 20 feet in front of you for 20 seconds. This short exercise can help reduce eyestrain.

Clean your hands and your contact lenses—properly. To avoid the risk of infection, always wash your hands thoroughly before putting in or taking out your contact lenses. Make sure to disinfect contact lenses as instructed and replace them as appropriate.

Practice workplace eye safety. Employers are required to provide a safe work environment. When protective eyewear is required as a part of your job, make a habit of wearing the appropriate type at all times, and encourage your coworkers to do the same.

References

http://www.cdc.gov/visionhealth/basic_information/index.htm

I, II, III: http://www.cdc.gov/visionhealth/basic_information/eye_health_tips.htm