

Eye Health: What you should know to help protect your vision



Eye Check Guidelines • Healthy Diet & Lifestyle Tips • Common Eye Conditions







Published by **Irish College of Ophthalmologists** 121 St Stephen's Green, Dublin 2 Telephone 01 402 2777, info@eyedoctors.ie www.eyedoctors.ie

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Eye Care in Ireland

An ophthalmologist or eye doctor is a medical doctor who specialises in the treatment and management of diseases of the eye and other medical conditions that have an effect on the eye or visual system. Eye doctors work in hospitals and in the community in the public and private sector.

GPs play a crucial role in eye care and act as a referral mechanism to community and hospital based eye doctors. Eye care is provided both through the public health system and the private sector. Optometrists also have an important role to play in eye health detecting many abnormalities that may require further investigation by an eye doctor.

Orthoptists and ophthalmic nurses are also important members of the eye care team.

It is estimated that there are over 270,000 people living in Ireland who are blind or vision impaired. Blindness and vision impairment have a major and wideranging impact on people's daily lives.

In Ireland a significant proportion, particularly the older population who are more vulnerable to age-related sight loss conditions, continue to suffer from sight loss which is almost entirely preventable. Research shows that up to 75% of blindness and vision loss can be avoided through early diagnosis and treatment.



TIPS to Keeping your **Eyes Healthy**

The Eye Doctors of Ireland are encouraging people to take positive steps to protect their sight, an action aimed at ultimately improving the nation's eye health and contributing towards a reduction in avoidable sight loss.

Proactive lifestyle steps to take better care of your eyes

Diet - eat the right foods

Studies show that what we eat can affect our vision. Foods that are particularly high in antioxidants can help to prevent retinal damage and certain eye conditions like cataract and age-related Macular Degeneration (AMD). An antioxidant that may be beneficial is lutein, found in many fruits and vegetables.

Foods recommended for eye health include:

- Broad leafy greens such as kale and spinach
- Brightly coloured fruit and veg such as corn, carrots, orange sweet peppers and oranges
- Omega-3 fatty acids found in oily fish like salmon, tuna and mackerel
- Broccoli
- Eggs
- Nuts



habits:

Exercise Lack of exercise contributes significantly to several eve conditions. particularly amongst people aged 60 and over. Exercise may reduce the risk of sight loss from narrowing or hardening of the arteries, high blood pressure and diabetes.

Alcohol Excessive alcohol consumption can lead to serious health conditions. which can have a detrimental effect on your eye health.

Tips to Keeping your **Eyes Healthy**

Smoking Cessation

After ageing, smoking is the biggest risk factor for developing Age-Related Macular Degeneration (AMD). Smoking also increases your risk of developing cataracts.

Know your family eye health history

Certain eye conditions can be hereditary, such as glaucoma. When detected early, it can be treated and controlled and therefore it would be very beneficial to know if this condition has been in your family history so you can be tested.

Take care in the sun:

Wearing sunglasses reduces the risks of damaging your eyes as a result of the strong ultra violet light from the sun's rays. Spending time in the sun without proper sunglasses can raise the risk that you will develop cataracts in later life. Check your glasses have a UV factor and carry the CE mark which indicates they meet the European safety standards. Once you have the right sunglasses, make

sure you wear them, especially in the summer when UV levels are at least three times higher than in the winter. Also be sure to wear them when participating in winter sports such as skiing, particularly at high elevations.

Computer screen breaks:

It is very important to take frequent breaks from your computer screen, at least once an hour to allow your eyes to rest. This will help to avoid problems such as eye strain, lack of focus, and headaches. If you have long documents to read, print them off and use to work alongside your computer.

Diabetics:

People who have diabetes are at risk of developing a condition called diabetic retinopathy and should ensure they have regular eye tests to enable early detection and treatment. The Eye Doctors of Ireland have welcomed the decision for the roll out of a National Diabetic Retinopathy Screening Programme aimed at preventing sight loss for those with the condition. The screening programme aims to reach, over time, an estimated growing population of 190,000 patients aged 12 and older with diabetes in Ireland in need of screening for potential further eye complications.



Frequently Asked Questions

What is an Eye Doctor (Ophthalmologist)?

An ophthalmologist, or eye doctor, is a medically trained doctor who has undertaken further specialist training and study in matters relating to the human eye. In the Republic of Ireland there are two types of Eye Specialists; Medical Eye doctors who undergo 11 years of clinical medical training, and Eye Surgeons who undergo on average 14 years of clinical medical training.

What is the difference between an eye doctor (ophthalmologist), optometrist and orthoptist?

Eye doctors (ophthalmologists) are medically trained doctors who have undertaken further specialist training and study in matters relating to the human eye. They examine, diagnose and treat diseases and injuries of the eye.

Optometrists (Ophthalmic Opticians)

are trained to examine eyes, give advice on visual problems and prescribe and fit glasses and contact lenses. One of their most important functions is to detect ocular abnormalities and if a disease or condition of the eye is suspected they will advise you to attend a medical practitioner.

Orthoptists diagnose and treat defects of vision and abnormalities of eye movement. They are usually part of a hospital care team looking after people with eye problems especially those related to binocular vision, amblyopia (lazy eye) and strabismus (squint).

When should someone see an Eye Doctor?

Adults should see an eye doctor as soon as possible if they notice any of the following:

- Changes in vision such as sudden spots, flashes of light, lightning streaks or jagged lines of light, wavy or watery vision, blurry faces, distortions or wavy lines, haloes around lights, double vision
- Changes in the field of vision such as shadows, curtain-like loss of vision, black spots or blurriness in central or peripheral (side) vision
- · Changes in colour vision
- Sudden loss of vision such as decreased or no vision in one or both eyes
- Physical changes to the eye such as crossed eyes, eyes that turn in, out, up or down, pain, signs of infection (Red eye, painful eye, swelling around eye, etc.)

If you have any of the above symptoms, see an eye doctor. Researchers believe that up to 75% of blindness and vision loss can be avoided once the condition is diagnosed and treated early.



FAOs

If someone is feeling healthy how often should they have their eyes checked?

Healthy adults who do not notice anything obviously wrong with their eyes should still have their eyes tested every two years.

If you have a family history of eye problems or have diabetes, you should have an eye examination every year and speak to your GP or optician about seeing an Eye Doctor or visit www.eyedoctors.ie to find an eye doctor in your area.

Are some people more at risk from eye disease than others?

Anyone can develop sight problems, but some people have a higher risk of eve disease and should have their eyes examined regularly.

These include:

- People who have diabetes are at risk of losing vision through a condition called diabetic retinopathy, in which the retina becomes damaged.
- Those with a tendency toward high intraocular pressure
- Those with a family history of glaucoma, cataract, macular degeneration, or retinal detachment
- Those with a previous eye injury;
- People taking certain medications
- Those with very poor eyesight.

How to make an appointment with an eye doctor

For an appointment to see any medical specialist working in the HSE, including eye doctors, you need to get a referral from your General Practitioner (GP). A GP has knowledge of the specialists in his/her area and can ensure that any important information relating to your medical history is passed to the eye doctor.

Can I make an appointment directly with an eye doctor?

While it is advisable to seek a referral from your GP many eye doctors working in the community will give you an appointment directly - you can find contact details for eye doctors at this page https://www.eyedoctors.ie/

opthalmologists/

How to check if an eye doctor is registered with the Irish Medical Council

Via the Council www.medicalcouncil.ie

The Irish Medical Council www.medicalcouncil.ie maintain the medical register, which lists all doctors (including eye doctors) who are qualified to practice in the Ireland. The Medical Council protects the interests of the public when dealing with registered medical practitioners. The Medical Council also holds the specialist register which gives details of a doctors' specialist training. The Irish College of Ophthalmologists advises the Medical Council on the suitability of eye doctors for inclusion on the Ophthalmology specialist division of the register.

Amblyopia



Amblyopia or "lazy eye" is reduced vision in an eye due to a lack of normal visual development during childhood. An amblyopic eye that does not see well early in life does not develop normal vision even with glasses.

Amblyopia affects 3-4% of children and usually involves one eye though rarely can involve both. The best time to correct amblyopia is during infancy or early childhood. After the first nine years of life, the visual system is usually fully developed and cannot be significantly changed.

The presence of amblyopia is not always easy to recognise. Children should have their vision tested by their eye doctor at the age of four or earlier if there is any "wandering" of the eyes. Children with a family history of amblyopia should be checked even earlier within the first two to three years of life. Failing a vision screening does not always mean there is

amblyopia as vision can often improve by prescribing glasses.

Amblyopia is treated by patching the stronger eye to strengthen the weaker eye. Patching may vary from a few hours a day to almost the entire day depending upon the visual acuity. Sometimes drops are used instead of patching to blur the better eye if cooperation is a problem.

If amblyopia is not treated, the weaker eye may permanently have poor vision which is irreversible with glasses.

If the problem is detected early, patching can help to improve vision in most children.

Cataracts



Cataracts are cloudy areas in the lens of the eye -which is normally clear, letting light pass through.

When cataracts are present, vision becomes hazy because light no longer passes through easily. If cataracts progress and become large and dense, they can be surgically removed in what is usually a safe, day case procedure.

Cataract surgery is a personal choice and should be considered when cataracts cause enough loss of vision to interfere with daily activities.

A cataract can only be removed using surgical techniques, although cataract surgery by lasers is being done experimentally.

Intraocular lens implants often replace the natural lens, and about one-fifth of people later develop a clouding in the lens area; in this situation, laser surgery is used to create a "window" to help restore clear vision.

Cataracts are most common in the aging eye, but also occur in younger people and people with diabetes.

Cataracts may develop slowly, or quickly, and at differing rates in each eye.

Conjunctivitis

"Conjunctivitis" refers to inflammation or infection of the membrane lining the "white" of the eye and the inside of the eyelids. It is very common, and can vary from a mild redness to a severe condition causing damage to the eye.

The most common type of conjunctivitis is viral. This will disappear on its own but is very contagious and can spread rapidly, especially among children. It is important that hands be washed frequently and kept away from the face. Towels should not be shared.

Bacterial conjunctivitis is much less common and is treated with antibiotics. Bacterial conjunctivitis generally has a lot of purulent (pus-like) drainage from the eye.



The hallmark of allergic conjunctivitis is itch. Rubbing the eyes, which gives momentary relief from the itch, only makes the inflammation and itching worse. Cool compresses may offer some relief. Also effective are lubricating eye drops and antihistamine eye drops, both of which are over-the-counter medicines.

For more severe conditions, examination and treatment by an eye doctor may be necessary. There are many prescription medications now available that give substantial relief to most people.

Not all red eyes have conjunctivitis. The conjunctiva can also be red due to dry eye, foreign body and inflammations inside the eye.

Diabetic Retinopathy



The commonest complication of diabetes is diabetic retinopathy, which is a deterioration of the blood vessels that nourish the retina. If these weakened vessels leak fluid or blood, they can damage or scar the retina and ultimately blur vision.

About 60 per cent of people with diabetes more than 15 years have some blood vessel damage in their eyes. However, only a small percentage of those people have serious vision problems.

Diabetic retinopathy is a leading cause of new blindness among adults in Ireland. Pregnancy and high blood pressure may worsen this condition in diabetic patients.

The best protection against the progression of diabetic retinopathy is awareness of the risks of developing sight disturbances and having regular examinations by an eye doctor. When treatment is necessary, the most common method is laser surgery to seal the leaking blood vessels.

Although approximately 80% of Type 1 diabetics (i.e. insulin-dependent) have retinopathy after 15 years of disease, only about 25% have any retinopathy after 5 years. The prevalence of proliferative diabetic retinopathy (PDR) is less than 2% at five years and 25% by 15 years.

For Type 2 diabetes (non-insulin-dependent), however, the onset date of diabetes is frequently not precisely known and thus more severe disease can be observed soon after diagnosis. Up to 3% of patients first diagnosed after age 30 (Type 2) can have clinically significant macular edema or high-risk PDR at the time of initial diagnosis of diabetes.

Glaucoma

Glaucoma is a leading cause of blindness in Ireland, loss of sight from glaucoma may be preventable, if detected early enough.



Glaucoma is a disease of the optic nerve (the part of the eye that carries the images we see to the brain), caused when pressure in the eye builds up because the eye's usual drainage capability becomes

blocked. Consequently, if the pressure inside the eye becomes too high, the optic nerve may become damaged, causing blind spots. If the glaucoma either has gone undetected for a while or the pressure increases rapidly, the entire nerve can be destroyed, and blindness results.

Glaucoma can strike at any age, but at greatest risk are people with a family history of glaucoma, those aged 40 or older, or anyone who suffered a serious eye injury.

Most forms of glaucoma are painless, so early detection and treatment by your eye doctor is the key to prevention.

Treatment commonly consists of medicated eye drops, but surgery may be required.

Age related Macular Degeneration (AMD)

on the retina is

Age Related Macular Degeneration is a degenerative condition of the central part of the light sensitive retina called the macula. The retina lines the inside of the back of the eye. Light focused

transformed to an electrical signal that is sent to the brain where 'seeing' takes place. The macula is the central part of the retina that is responsible for the sharp, straight-ahead vision that we use for seeing fine details, reading, driving,

recognising faces, or seeing street signs. Other parts of the retina are used for side (peripheral) vision. Age related macular degeneration (AMD) more commonly affects people over 60.

There are two main types of AMD:

DRY MACULAR DEGENERATION is by far the most common form affecting 85-90% of patients with the condition. It occurs due to age related wear and tear of the central retina. It is also the milder type of the condition resulting in some difficulty with reading and fine vision- the patient may simply need extra magnification and good light for reading. Dry AMD represents degenerative change of the outer layers of the retina which can lead to the gradual blurring of central vision. Although there is no known cure for dry AMD, eye doctors do recommend conservative measures such as healthy diet, stopping smoking and taking a lutein based vitamin supplement.

WET MACULAR DEGENERATION is the more severe but less common form of the condition affecting less than 10% of patients with the condition. However it is responsible for 90% plus of the vision loss in this condition. Vision loss tends to be more severe in wet AMD. Compared with the dry form, vision may change quickly with the development of wet AMD. In wet AMD abnormal blood vessels grow in under the macula leading to a cycle of bleeding, leakage and scar tissue growth. Patients may notice that straight lines appear crooked and distorted, as a result of fluid leakage from blood vessels under the retina lifting up the retina.

Eye doctors now have excellent treatments for wet AMD in the form of courses of medication given by tiny injection into the eye (intravitreal injections). These injections are of a drug called Anti-VEGF aimed at sealing the leaking blood vessels. These treatments can slow and stabilise progression in 95% of cases and significantly improve vision for 30-40% of patients, however early diagnosis is crucial to maximise their effectiveness. There are other treatment options such as laser photocoagulation and photodynamic therapy which are now used much less frequently since the advent of intravitreal therapy.

Eye doctors encourage patients with AMD to monitor the vision in each eye separately using an Amsler Grid so that should they start to develop wet AMD they can detect the symptoms such as new blurring of reading vision or the onset of distortion of their vision. In the event of such symptoms patients should contact their eye doctor with a view to early treatment if necessary.

AMD is one of the most common causes of vision loss in older adults. It does not, by itself, result in total blindness as the peripheral retina remains unaffected. AMD can affect fine vision such as reading and driving but most patients maintain independence and are able to continue those activities that do not require detailed vision. Most people who have had severe vision loss from macular degeneration can be assisted with low vision aids for reading and other tasks.

Prevention of Eye Injuries

EYE PROTECTION

Prevention of eye injuries is essential. Modifying risk factors and implementing appropriate eyewear protection can reduce the rates of

ocular injury while allowing patients to maintain a productive career and enjoy their leisure pursuits.

Violence is a significant cause of ocular trauma.

Assault related injuries involve predominately young males together with alcohol or drugs unsettled social environment and unemployment. Where appropriate law

enforcement and social services should be used to prevent violence.

Almost every type of sport has been associated with eye injury. Ideally any participants in at-risk sports should wear protective devices.

Many injuries occur in the work place where safety eyewear is inadequate or

not worn. Company management must be involved in preventive strategies to improve safety in the workplace.

Eyewash stations should be available where there is a risk of chemical injury.

Simple

'Do's & Don'ts'

Do have your eyes tested regularly

Do find out your family history

Do eat a healthy, balanced diet

Do wear sunglasses to protect your eyes from the sun's

harmful UV rays

Do care for your contact lenses properly using the solution

designed for the lens

Do take more exercise to maintain a healthy weight and

heart

Do take computer screen breaks

Don't ignore symptoms or changes in your sight – see an eye

doctor if you have

any concerns

Don't smoke!

Don't exceed the recommended

alcohol intake

Don't share make up or eye

contact lenses

Don't ever let water come in

contact with your soft

contact lenses



Support Services



NCBI

NCBI, the national sight loss agency, is a not-for-profit charitable organisation which provides support and services nationwide to people experiencing sight loss.

NCBI Head Office: Whitworth Road, Drumcondra, Dublin 9.

Tel locall: 1850 33 43 53

Email info@ncbi.ie · www.ncbi.ie



Fighting Blindness

Fighting Blindness is an Irish, patient-led organisation funding research into treatments and cures for blindness. We also provide a unique professional counselling service, the Insight Counselling Centre, for people and families affected by sight loss. Our vision is to cure blindness, support those experiencing sight loss and empower patients.

1 Christchuch Hall, High Street, Dublin 8.

TeL 01 709 3050

Email: fightingblindness · www.fightingblindness.ie



Irish Guide Dogs for the Blind

Irish Guide Dogs for the Blind is a national charity dedicated to helping persons who are blind or have impaired vision and families of children with autism to achieve improved mobility and independence.

Irish Guide Dogs for the Blind

National Headquarters & Training Centre, Model Farm Road, Cork. Tel 021 487 8200

Email: info@guidedogs.ie · www.guidedogs.ie



ChildVision – National Education Centre for Blind Children

Pre-school and Early Intervention Service; Primary School; Secondary School; Vocational Training Programme; Residential facilities; Low Vision Clinic; Nursing; Physiotherapy; Family Resource Activities; National Braille Production; Occupational Therapy and Speech and Language Therapy; Equine Therapy and Animal Assisted Therapy, Outreach Centre in Cork.

Gracepark Road, Drumcondra.

Tel 01 837 3835

Email: childvision.ie · www.childvision.ie

Support Services



Anne Sullivan Foundation for Deaf / Blind People

The Anne Sullivan Foundation for Deafblind People is an Irish National Agency to help people who are deaf and blind. The Foundation provides a residential centre with educational and nationwide outreach counselling services. Respite services are available for resident/non-resident deafblind people and their families.

40 Lower Drumcondra Road, Dublin 9. Tel 01 830 0562 Email: info@annesullivan.ie · www.annesullivan.ie



Age Action Ireland

Age Action is a charity which promotes positive ageing and better policies and services for older people.

30/31 Lower Camden Street, Dublin 2. Tel 01 475 6989 Email: info@ageaction.ie · www.ageaction.ie



AMD Alliance

AMD Alliance International provides information and support to individuals and families affected by AMD.

www.amdalliance.org



Irish Blind Sports

Irish Blind Sports (IBS) is the National Governing Body (NGB) for sport and leisure activities for blind and visually impaired people in Ireland. The Organisation's mission is to enable blind and visually impaired people to participate fully in the sporting and recreational activities of their choice.

1 Christchurch Hall, High Street, Dublin 8.
Tel: 01 454 7865 · Email: ibsports · www.ibsports.ie

Remember that if you have an issue or a worry with your eye condition, the best person to talk to is your eye doctor

About Irish College of Ophthalmologists

Established in 1991, the Irish College of Ophthalmologists (ICO) is the recognised training and professional body for medical and surgical eye doctors in Ireland.

The ICO is dedicated to promoting excellence in eye care through the education of its members, trainees and the public. Its goal is to maintain standards of excellence for the restoration of vision and the preservation of sight. We do this by educating eye doctors in training, providing on-going education for eye doctors in practice, giving accurate medical advice to the public and policy guidance for the government.

For further information, visit www.eyedoctors.ie





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