HEALTH BASICS

Eye health

Eye health means protecting vision and checking the eyes for changes, injury, and disease.

WHAT IT IS
Care of vision and the structures of the eyes

WHERE IT COMES UP
Eye exams, vision changes, injuries, and long-term conditions

WHY IT MATTERS
Supports sight and helps detect eye disease early

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Optometrist, ophthalmologist, or urgent eye service

HOW IT IS CHECKED
Vision tests and a complete eye examination

Overview

Eye health is a broad term for how well your eyes and visual system work. It includes clear sight, comfortable eyes, normal eye structures, and protection from injury. It is not a disease or a diagnosis.

Good vision involves more than reading small letters. Your eyes must focus light, detect colour and movement, adjust to different lighting, and send accurate signals to your brain. Eye health can change with age, injury, medicines, inherited conditions, and health problems such as diabetes or high blood pressure.

Some eye conditions cause noticeable changes, but others may develop without early warning signs. An eye examination can therefore be useful even when your sight seems normal. The right timing depends on your age, vision, family history, medical conditions, and previous eye findings.

Optometrists test vision, prescribe glasses or contact lenses, and assess many eye conditions. Ophthalmologists are medical doctors who diagnose and treat eye disease, including with medicines and surgery. Available services and professional roles differ between healthcare systems.

How it works

Light enters through the cornea , the clear front surface of the eye. It then passes through the pupil , the opening in the coloured iris. The lens changes shape to help focus light onto the retina , a light-sensitive layer at the back of the eye.

The retina turns light into electrical signals. These travel through the optic nerve to the brain, where they are processed into the images you see. The macula, a small central part of the retina, provides detailed central vision used for reading and recognising faces.

Tears protect and lubricate the eye's surface. Eyelids spread tears when you blink and help keep out dust. Muscles around each eye allow both eyes to move and work together.

An eye examination may include several checks:

Not everyone needs every test. Eye pressure alone, for example, cannot confirm or rule out glaucoma. The findings must be considered alongside the appearance of the optic nerve, visual field results, and other information.

- A visual acuity test measures how clearly you see at different distances
- Refraction checks whether lenses improve your focus
- Eye movement and pupil tests assess how the eyes respond
- Visual field testing checks side, or peripheral, vision
- Tonometry measures pressure inside the eye
- A dilated examination uses drops to widen the pupils so the retina and optic nerve can be examined

Why it matters for your health

Vision affects reading, driving, work, learning, balance, and moving around safely. Correcting a focusing problem may improve daily function and reduce eye strain, although headaches or tired eyes can have causes unrelated to vision.

Eye examinations can identify changes that you may not notice yourself. These include damage to the optic nerve, retinal changes related to diabetes, and early clouding of the eye's lens.

Your general health and eye health are connected. Diabetes can damage retinal blood vessels. High blood pressure may also affect these vessels. Some inflammatory or immune conditions can involve the eyes, while certain medicines can require eye monitoring.

An eye examination is not a substitute for routine medical care. A finding in the eye may suggest that further assessment is needed, but it does not by itself confirm a wider health condition.

What can go wrong

Refractive errors happen when the eye does not focus light correctly. They include short-sightedness, long-sightedness, astigmatism, and age-related difficulty focusing close up. Glasses, contact lenses, or certain procedures may correct them.

Cataract is clouding of the eye's natural lens. It can make vision blurred, faded, or more affected by glare.

Glaucoma describes a group of conditions that damage the optic nerve. Some forms develop gradually without obvious early changes, while an uncommon acute form can cause severe pain and sudden visual disturbance.

Age-related macular degeneration affects the macula and can damage central vision. Peripheral vision is usually affected differently.

Diabetic retinopathy is retinal blood vessel damage caused by diabetes. Regular diabetes care and the recommended retinal checks are important because early changes may not be noticeable.

Retinal detachment occurs when the retina pulls away from the tissue supporting it. New flashes of light, a sudden increase in floaters, or a shadow or curtain across the vision need urgent assessment the same day.

Infections and inflammation can affect the eyelids, eye surface, or deeper structures. A painful red eye, strong sensitivity to light, or reduced vision needs prompt assessment. This is especially important if you wear contact lenses.

Injuries include scratches, foreign objects, chemical exposure, and blunt or penetrating trauma. Chemical splashes should be rinsed immediately with plenty of clean, lukewarm water while emergency help is arranged. Do not delay rinsing to search for a specific solution.

Sudden loss of vision, severe eye pain, a penetrating injury, or vision changes with facial drooping, weakness, confusion, or speech difficulty are emergencies. Use emergency services rather than waiting for a routine appointment.

What you can do

Arrange routine eye examinations at the interval recommended for you. Ask how your age, family history, diabetes, current prescription, or previous results affect when you should return.

Keep a record of eye operations, injuries, diagnoses, prescriptions, and medicines. Tell the eye professional if close relatives have glaucoma, inherited retinal disease, or major vision loss.

If you have diabetes or high blood pressure, attend the medical and eye checks offered to you. Ask which retinal examination you need and how you will receive the result.

Wear suitable eye protection for work, home repairs, sports, or activities involving chemicals, flying particles, or impact. Ordinary prescription glasses are not always protective eyewear.

Choose sunglasses labelled as blocking UVA and UVB radiation. A wide-brimmed hat can provide additional shade. Dark lenses without proper ultraviolet protection are not enough.

If you wear contact lenses, follow the replacement and cleaning instructions for your specific lenses. Wash and dry your hands before handling them. Keep lenses away from tap water, pools, and hot tubs, and do not sleep in them unless your eye-care professional has said that your lenses are designed for this use.

Seek routine advice if your prescription seems outdated, your eyes are often uncomfortable, or a gradual change is affecting daily tasks. Seek same-day urgent eye care for new flashes, many new floaters, a curtain-like shadow, a painful red eye, light sensitivity with reduced vision, or a contact-lens-related red eye.

Use emergency care for sudden major vision loss, severe eye trauma, chemical exposure, or visual changes accompanied by possible stroke symptoms.

Common questions

Do I need an examination if I can see clearly?

Possibly. Clear central vision does not show whether every part of the eye is healthy. The need and timing of an examination are based on age, risk factors, medical history, and previous findings.

Are vision screening and a complete eye examination the same?

No. Screening usually checks selected issues, such as distance vision. A complete examination can assess focusing, eye movement, eye pressure, the optic nerve, and the retina. It may include pupil-dilating drops.

Are floaters always dangerous?

No. Floaters are small shapes caused by material within the eye's clear gel. Many are harmless. A sudden increase, especially with flashes or a shadow in the vision, may be linked to a retinal

tear or detachment and needs urgent assessment.

Can screens permanently damage my eyes?

Normal screen use is not known to cause permanent eye damage. Long periods of close work can contribute to temporary dryness, tiredness, or focusing discomfort. Taking regular breaks, blinking, and adjusting glare or viewing distance may help.

Can an eye examination detect other health problems?

It can reveal changes associated with conditions such as diabetes or high blood pressure. These findings may lead to further testing, but an eye examination does not replace a medical diagnosis.

What should I bring to an eye appointment?

Bring your current glasses or contact lenses, a list of medicines, and details of previous eye problems or surgery. It can also help to note when a vision change began, whether it affects one or both eyes, and whether it is constant or intermittent.

Sources