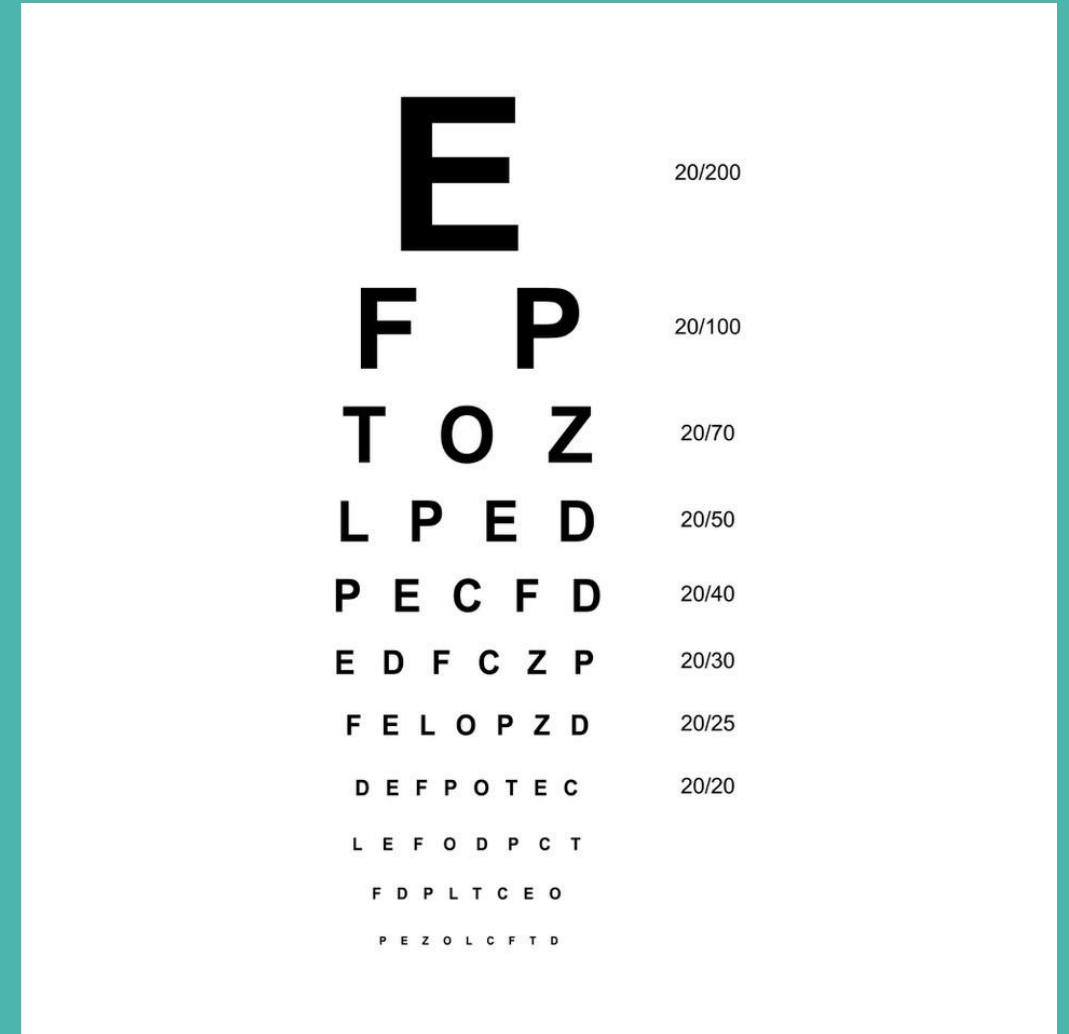


Visual Disorders and Driving

Traffic Medicine Webinar 16.05.2025
Dr Mary Jo Ryan



Chapter 7 Visual disorders Updates from 2022 version.

- Inclusion of guidance for Blepharospasm
- Clarification of Night Blindness for Group 1 and Group 2 drivers.

Visual Disorders

- A licence holder or applicant must meet the standards for visual acuity and fields (assessed by a confrontation visual field test in the first instance) and if there is reason to doubt that these are adequate, the applicant or licence holder should undergo a more detailed examination by a specialist (an ophthalmologist or orthoptist or other medical practitioner with a special interest in defects of eyesight or optometrist).
- Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment. Group 1 and Drivers with monocular vision cannot obtain or renew a Group 2 driving licence.
- Note: Bioptic telescope devices are not accepted for driving by the NDLS.

Acuity

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Acuity	<p>Permitted to drive provided the driver has binocular visual acuity, with corrective lens as necessary, of at least 6/12 (0.5 decimal) on a Snellen chart.</p> <p>If the driver has an illness likely to cause progressive loss of visual acuity, on the advice of a competent medical authority, a 1 or 3 year licence may be appropriate.</p> <p>Driver should notify NDLS.</p>	<p>Permitted to drive provided the driver has a visual acuity, using corrective lenses as necessary, of at least 6/7.5, Snellen (0.8 decimal) in the better eye and at least 6/60, Snellen(0.1 decimal) in the other eye.</p> <p>Where glasses are worn to meet the minimum standards, they should have a corrective power $\leq +8$ dioptries.</p> <p>It is also necessary for all drivers of Group 2 vehicles to be able to meet the prescribed and relevant Group 1 visual acuity requirements.</p>

MY VISION'S FINE



Blepharospasm

- Progressive involuntary spasm of the orbicularis oculi muscle and the upper facial muscle.
- Quite debilitating disease of people over 60 which is idiopathic in origin and quite uncommon, but 3x more common in women than men and significant re: driving as it may render the patient functionally blind.
- Treatment is botulinum injections every 3-4 months or surgery.

Blepharospasm and Cataract

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Blepharospasm	Can drive as long as they are regularly attending a specialised unit and compliant with regular treatment, either surgery, botox or both as deemed necessary and advised by their eye specialist.	Can drive as long as they are regularly attending a specialised unit and compliant with regular treatment, either surgery, botox or both as deemed necessary and advised by their eye specialist.
Cataract Includes severe bilateral cataracts, failed bilateral cataract extractions and post cataract surgery where these are affecting the eyesight.	Permitted to drive provided the driver is able to meet the acuity and visual field requirements, and more detailed specialist examination is indicated if there is concern that these are not adequately met. (See Appendix, Item A)	Permitted to drive provided the driver is able to meet the above prescribed acuity requirement. In the presence of cataract, glare may affect acuity and visual field requirements, and more detailed specialist examination is indicated if there is concern that these are not adequately met. (See Appendix, Item A)

Binocular single vision

- Vision achieved by the coordinated use of both eyes together.
- Separate and slightly dissimilar images arising in each eye are appreciated as a single image by the process of fusion.
- Fusion allows stereopsis to occur where the slightly dissimilar images from each eye are interpreted to allow a perception of depth.

Monocular Vision

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Monocular vision (Includes the use of one eye only for driving)	<p>Complete loss of vision in one eye (if there is any light perception, driver is not considered monocular).</p> <p>Permitted to drive when clinically advised by a competent medical authority that driver has adapted to the disability and the prescribed eyesight standard in the remaining eye can be satisfied and there is a normal monocular visual field in the remaining eye, i.e. there is no area of defect which is caused by pathology.</p> <p>Driver should notify NDLS if medical advice is to cease driving for 6 months or longer.</p>	<p>Complete loss of vision in one eye or corrected acuity of less than 6/60 (0.1 decimal) in the weaker eye:</p> <p>Not permitted to drive.</p> <p>Driver should notify NDLS.</p>

Visual Field Defects

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Visual field defects Disorders such as severe bilateral glaucoma, severe bilateral retinopathy, retinitis pigmentosa and other disorders producing significant field defect including partial or complete homonymous hemianopia/ quadrantanopia or complete bitemporal hemianopia.	Permitted to drive provided it is confirmed that the horizontal visual field is at least 120 degrees, the extension is at least 50 degrees left and right and 20 degrees up and down. No defects should be present within a radius of the central 20 degrees. If the driver has an illness likely to cause progressive loss of visual field, NDLS must be notified and on advice by a competent medical authority, a 1 or 3 year licence may be appropriate. Driver should notify NDLS. See item B of the appendix to this chapter for guidance on more detailed assessment of visual fields. See item C of the appendix for consideration as an exceptional case if not meeting these standards.	Permitted to drive provided the horizontal visual field should be at least 160 degrees, the extension should be at least 70 degrees left and right and 30 degrees up and down. No defects should be present within a radius of the central 30 degrees. It is recommended that formal perimetry is undertaken for Group 2 drivers if there is a history of any medical condition that may affect a driver's binocular field of vision (central and/or peripheral). Driver should notify NDLS. See item B of the appendix to this chapter for guidance on more detailed assessment of visual fields. See item C of the appendix for consideration as an exceptional case if not meeting these standards.

Diplopia

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Diplopia	<p>Not permitted to drive on detection.</p> <p>Permitted to drive thereafter on confirmation to the NDLS that the diplopia is controlled by glasses (with or without a prism) or by a patch which the licence holder undertakes to wear while driving. (If patching, note requirements above for monocularity).</p> <p>Exceptionally a stable uncorrected diplopia of appropriate duration (for example, 6 months or more) may be compatible with driving if there is support from a competent medical authority indicating satisfactory functional adaptation. For treated decompensated phoria, driving can resume without informing the NDLS.</p>	<p>Not permitted to drive on detection.</p> <p>Driving must be discontinued if diagnosis is of permanent intractable diplopia. Patching is not acceptable.</p> <p>Driver should notify NDLS.</p>

Night Blindness

This is a symptom of other conditions, there are two main ways it may happen:

1. Physically there is a lack of light making it as far as your retinas to produce vision due to corneal opacity/ cataract/ glaucoma/ small pupil/ drug induced/ inflammation/ neurological.
1. Where the retinal cells don't react to light correctly due to retinitis pigmentosa/ rod cone dystrophy/ vitamin A deficiency/ post weight loss surgery/ poor diet.

Night Blindness and Colour Blindness

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Night blindness	<p>Permitted to drive during daylight hours provided acuity and field standards have been met. Cases should be considered on an individual basis by an appropriately qualified medical authority.</p> <p>Driver should notify NDLS.</p>	<p>Permitted to drive during daylight hours provided acuity and field standards have been met. Cases should be considered on an individual basis by an appropriately qualified medical authority.</p> <p>Driver should notify NDLS.</p>
Colour blindness	<p>Permitted to drive with no restriction on licence.</p> <p>Driver needn't notify NDLS.</p>	<p>Permitted to drive with no restriction on licence.</p> <p>Driver needn't notify NDLS.</p>

Appendix – Chapter 7

Visual notes

Vision Requirements for Holding of Group 1 Licence Entitlement

A) Elements which should be assessed in a more detailed assessment

Visual acuity, field of vision, twilight vision, glare and contrast sensitivity, diplopia and other visual functions that can compromise driving safety with no elevated risk: adjudication determined by clinical judgement.

B) Guidance on formal field of vision testing

The minimum field of vision for driving safety is defined as “a field of at least 120° on the horizontal, measured using a target equivalent to the white Goldmann III4e settings. In addition, there should be no significant defect in the binocular field which encroaches within 20° of fixation above or below the horizontal meridian”.

This means that homonymous or bitemporal defects which come close to fixation, whether hemianopic or quadrantanopic, are not normally accepted as safe for driving.

If a visual field assessment is necessary to determine fitness to drive, a number of tests are possible: in the UK and Australia, for example, a binocular Esterman field is recommended. Monocular full field charts may also be requested in specific conditions. Exceptionally, Goldmann perimetry, carried out to strict criteria, will be considered. For an Esterman binocular chart to be considered reliable for licensing, the false positive score must be no more than 20%. When assessing monocular charts and Goldmann perimetry, fixation accuracy will also be considered.

Defect affecting central area ONLY

Pending the outcome of current research, the following are generally regarded as **acceptable central loss** as measured by the Esterman field method:

- Scattered single missed points.
- A single cluster of up to 3 adjoining points.

The following are generally regarded as **unacceptable** (i.e. 'significant') central loss as measured by the Esterman field method:

- A cluster of 4 or more adjoining points that is either wholly or **partly** within the central 20 degree area.
- Loss consisting of both a single cluster of 3 adjoining missed points up to and including 20 degrees from fixation, **and any** additional separate missed point(s) within the central 20 degree area.
- **Any** central loss that is an **extension** of a hemianopia or quadrantanopia of size greater than 3 missed points.

Defect affecting the peripheral areas - width assessment

The following will be disregarded when assessing the width of field:

- A cluster of **up to 3** adjoining missed points, unattached to any other area of defect, lying on or across the horizontal meridian.
- A vertical defect of only single point width but of any length, unattached to any other area of defect, which touches or cuts through the horizontal meridian.

C) Exceptional cases which can be considered for Group 1 drivers only^[121]

Drivers who have previously held full driving entitlement, removed because of a field defect which does not satisfy the standard, may be eligible to be considered as exceptional cases on an individual basis by an ophthalmologist, subject to strict criteria:

- The defect must have been present for at least 12 months.
- The defect must have been caused by an isolated event or a non-progressive condition.
- There must be no other condition or pathology present which is regarded as progressive and likely to be affecting the visual fields.
- The applicant has sight in both eyes.
- There is no uncontrolled diplopia.
- There is no other impairment of visual function, including glare sensitivity, contrast sensitivity or impairment of twilight vision.

In order to meet the requirements of European law, to provide a driving licence for 1, 3 or 10 years the NDLS will, in addition, require:

- Clinical assessment of full satisfactory functional adaptation: as there is no current objective measure of adaptation, this should be on the basis of a decision by a consultant neurologist, stroke physician or ophthalmologist with due multidisciplinary support, and with the option of a second opinion from another consultant ophthalmologist, stroke physician or neurologist.
- A satisfactory practical driving assessment, carried out by an appropriately qualified driving assessor, must subsequently be completed.
- An individual who is functionally monocular cannot be considered under exceptional case criteria.
- D501 (Medical Report) or D502 (Eyesight Report) are only accepted by the NDLS if printed and signed as double-sided documents.

I'M REALLY FEELING
MY AGE. I'VE HAD A HEART BYPASS,
A HIP REPLACEMENT, MY EYES ARE BAD
I'M GOING DEAF, I'VE GOT BAD CIRCULATION,
I CAN'T FEEL MY FEET ANY MORE, I GET
DIZZY SPELLS & I CAN'T REMEMBER HOW
OLD I AM. THANK GOD I'VE STILL
GOT MY DRIVING LICENCE.

