

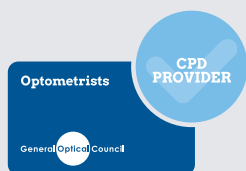
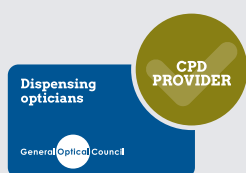


LEARNING DOMAINS



CLINICAL
PRACTICE

PROFESSIONAL GROUPS



CLOSING DATE: 6 January 2023

ANSWERS PUBLISHED: February 2023

CPD CODE: C-103175

MCQs AVAILABLE ONLINE:
3 October 2022

This CPD session is open to all FBDO members and associate member optometrists. Successful completion of this CPD session will provide you with a certificate of completion of one non-interactive CPD point. The multiple-choice questions (MCQs) are available online only from Monday 3 October 2022. Visit www.abdo.org.uk. After member login, scroll down and you will find CPD Online within your personalised dashboard. Six questions will be presented in a random order. Please ensure that your email address and GOC number are up-to-date. The pass mark is 60 per cent.

Focused on the road ahead

By Pauline Bradford FBDO CL FBCLA AFHEA

A dispensing optician (DO) is likely to see a high proportion of patients who drive during the course of a day whilst working in practice. Any potential issues around driving will often be managed in the consulting room – but could be discussed during the handover. Sometimes, the patient may also ask the DO for further clarity or seek reassurance as their eligibility to drive can be an emotive issue for many.

The purpose of this article is to revisit the appropriate standards with the reader and ensure they are up-to-date with current standards and confident having these conversations. It may also be stored at the practice as a resource to be referred back to in the future, should that be required.

At the time of writing, there are more than 30 million drivers registered with the Driver and Vehicle Licensing

Agency (DVLA) in the UK¹. It's fair to say that most eyecare practitioners will see several of these individuals each day in practice and, unless your patient is a bungee jumper, driving is probably the most hazardous activity they take part in regularly. Most of these patients will hold a standard Group 1 licence and satisfy the DVLA requirement of reading a number plate that was made after 2001 at 20m binocularly² – or 6/12 on a Snellen chart.

In addition, there is a requirement that they have a minimum horizontal visual field of 120°³, with an extension of at least 50° left and right. There should also be no significant defect in the binocular field that encroaches within 20° of the fixation above or below the horizontal meridian. The purpose of this article is not to focus on these patients, but on those cases that are seen less frequently, but are equally important.



CPD CODE: C-103175

More than 30 million people are registered to drive in the UK

A Group 2 licence refers to the driving of larger vehicles such as buses and lorries, but in some local authorities this can include taxi drivers too. Holders of this type of licence will still be regular visitors to the practice as well and, understandably, these drivers have additional visual requirements such as a visual acuity of at least 6/7.5 in the better eye and 6/60 in the poorer eye.

Furthermore, there are higher expectations of these Group 2 drivers in terms of their visual fields. They are required to have an uninterrupted measurement of at least 160° on the horizontal plane with extensions of at least 70° left and at least 70° right, and extensions of at least 30° above and at least 30° below the horizontal plane. There should be no significant defect within 70° right and 70° left between 30° up and 30° down³ and no defect should be present within a radius of the central 30°. The test should be carried out using a target equivalent to the white Goldmann III4e settings⁴.

Another interesting feature of the Group 2 requirements is that if spectacles are worn to meet the standards, their corrective power must not exceed +8.00D in any meridian of either lens, but there is no limit to the power if contact lenses are worn³. There is no upper limit on minus prescriptions in spectacles or contact lenses.

EYE CONDITIONS AND THE DVLA

There are 23 eye conditions requiring declaration to the DVLA even if they are only in one eye, and 89 that require declaration if both eyes are affected. A full list of these conditions can be found at www.gov.uk/eye-conditions-and-driving

One of the most common conditions seen regularly in practice, which might prompt the questions around the need to declare or not, is cataract. As long as the standard is still able to be met, with or

GROUP 1 Car and motorcycle	GROUP 2 Bus and lorry (and sometimes taxi)
Often safe to drive and may not need to notify DVLA as long as the minimum standards are met ³ <i>Glare may reduce ability to pass the number plate test even when cataracts allow apparently appropriate acuities³</i>	Often safe to drive and may not need to notify DVLA as long as the minimum standards for Group 2 drivers are met ³ <i>Glare may reduce ability to pass the number plate test even when cataracts allow apparently appropriate acuities³</i>

TABLE 1: Driving and cataracts

GROUP 1 Car and motorcycle	GROUP 2 Bus and lorry (and sometimes taxi)
If glaucoma only in one eye and the standard is met, no need to inform DVLA ⁵ If has glaucoma in one eye and hypertension in the other, no need to inform the DVLA ⁵ If glaucoma present in both eyes, must notify DVLA ⁵	If glaucoma in only one eye, the DVLA must be notified, even if the standards are met ⁵

TABLE 2: Driving and glaucoma

without a correction, there is no requirement to inform the DVLA – even if they have cataract in both eyes (Table 1).

GLAUCOMA

The situation is slightly different for patients diagnosed with glaucoma. If they hold a Group 1 licence, these patients do not need to inform the DVLA if only one eye is affected, and they still meet the required standard⁵. They do need to inform the DVLA if they have glaucoma in both eyes, even if they meet the standards. Holders of a Group 2 licence need to inform the DVLA if they have glaucoma in one or both eyes (Table 2)⁵. Only 12 per cent of people suffering from glaucoma will ultimately lose their driving licence⁵.

If a patient is required to inform the DVLA of an eye condition, this is done by completing a V1 form, which can be downloaded from the DVLA website. The DVLA also provides a list of notifiable medical conditions, which can be found on

the gov.uk website at www.gov.uk/driving-medical-conditions. Patients can face a fine of up to £1,000 if they fail to notify the DVLA of a new condition⁵.

DIPLOPIA

In addition to the visual acuity and visual field requirements, the DVLA has rules about driving with diplopia⁴. The patient should cease driving at their initial diagnosis, but on the DVLA receiving confirmation that it is controlled with spectacles or a patch, can resume as long as they commit to wearing the device whenever they are driving. However, the minimum visual field requirements are still applicable.

It is possible that a stable uncorrected diplopia of six months' duration or more may be considered compatible with driving if there is consultant support indicating satisfactory functional adaptation. Patching is only an acceptable option for holders of a Group 1 licence, however, as holders of a Group 2 licence would not be able to meet the additional visual field requirements whilst wearing a patch (Table 3)⁴.

MONOCULAR VISION

This includes binocular patients who are, for any reason, making use of only one eye. It refers to a complete loss of vision in one eye, so assumes no light perception (Table 4)².

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COLOUR VISION

Whilst the normal range of colour vision is considered for many occupations, the DVLA does not require drivers to inform them of any defects in colour vision for holders of either Group 1 or Group 2 licences³.

NYCTALOPIA

Sufferers of nyctalopia or night blindness must not drive and must inform the DVLA. This applies to holders of both Group 1 and Group 2 licences⁶. In some cases, a licence may be issued after individual consideration has been carried out and it has been demonstrated that the standards can be met.

BLEPHAROSPASM

Sufferers of blepharospasm should not drive and should inform the DVLA and this applies to all types of licence holders (Table 5)³. A licence may still be awarded if clinical evidence can demonstrate it to be mild or well controlled, although treatment to control it such as botulinum toxin or Botox, can produce side-effects such as diplopia³.

DRIVING IN TINTED LENSES

Some patients like to wear tinted spectacles for driving. Care needs to be taken when prescribing or dispensing tints for this purpose as there needs to be at least 80 per cent light transmission in order to be suitable for driving in all conditions⁷. Darker tints can be used for driving in brighter conditions but it's important to ensure the correct tint is chosen and the patient is aware it should only be used for its intended purpose. Furthermore, it is essential that a driver is still able to recognise traffic signals and that this is not distorted by the wearing of a tint, which is defined by BS EN ISO 13666:2019 Ophthalmic optics. Spectacle lenses. Vocabulary.

Table 6 shows which range of tints are available for driving^{7,8}. BS ISO 12312-1:2022 indicates filters with a luminous transmittance of less than 75 per cent are not suitable for use in twilight or at night⁷.

PHOTOCHROMIC LENSES

Traditional photochromic lenses have a variable transmittance but their range is limited to as little as 15 per cent change

GROUP 1 Car and motorcycle	GROUP 2 Bus and lorry (and sometimes taxi)
<p>Must not drive and must notify DVLA⁴</p> <p>Driving may resume after DVLA has received confirmation that the diplopia is controlled, for example by:</p> <ul style="list-style-type: none"> glasses or⁴ a patch which they must agree to use while driving⁴ <p>Occasionally, a stable uncorrected issue present for six months or more may be acceptable if supported by clinical evidence of satisfactory functional adaptation⁴</p>	<p>Must not drive and must notify DVLA⁴</p> <p>Licensing will be refused or revoked permanently in cases of unadapted diplopia⁴</p> <p>Patching is not acceptable⁴</p>

TABLE 3: Driving and diplopia

GROUP 1 Car and motorcycle	GROUP 2 Bus and lorry (and sometimes taxi)
<p>Must not drive and may need to notify DVLA</p> <p>For complete loss of vision in one eye, the driver:</p> <ul style="list-style-type: none"> must meet the same visual acuity and visual field standards as binocular drivers² may drive only after clinical advice of successful adaptation to the condition² <p>Only people with monocular vision who fail to meet these requirements are required to notify DVLA²</p>	<p>Must not drive and must notify DVLA</p> <p>A licence will not be issued if in one eye there is:</p> <ul style="list-style-type: none"> complete loss of vision or² corrected acuity falls below Snellen 3/602 <p>Some 'grandfather rights' exist²</p>

TABLE 4: Driving and monocular vision

during driving in many cases, as the windscreen filters out the UV required for activation. Their performance is also variable with temperature change and there is a potential risk of fatiguing as they age too, which reduces their transmittance and reaction speed. For this reason, the DVLA Medical Advisory Panel (June 2007) made the following recommendation regarding the use of photochromic lenses for driving: *"Some photochromics even when fully bleached may only transmit 80 per cent of the light. The panel recommends drivers should avoid using photochromic lenses at night"*^{7,9}.

POLARISING LENSES

Polarising lenses can be useful for drivers when used in bright sunlight, and are particularly helpful in eliminating glare from light reflected from surfaces such as a wet road. As their transmittance is 35 per cent, they are obviously not suitable for night driving (Table 6) and they can show up stress patterns in the windscreen, rendering some instrument panels invisible⁷.

SUPPORT AND COMMUNICATION

It has not been the remit of this article to examine how a General Optical Council (GOC) registrant may consider communicating with a patient in their discussions around their vision and driving needs, but to highlight the latest information in relation to UK driving requirements. However, there is always a need to ensure communication is appropriately conducted in a supportive manner.

The GOC produces helpful guidance on disclosing confidential information and what to do if a patient may not be fit to drive, and this can be found on its website¹⁰. Additionally, it is imperative that patient discussions, and any information and advice provided regarding driving, is fully and clearly documented within the patient records. This applies to both the optometrist and the DO.

The following case studies explore two patient scenarios, the questions raised in relation to their driving needs and their vision, and how these would be considered utilising the information introduced in this article.

GROUP 1 Car and motorcycle	GROUP 2 Bus and lorry (and sometimes taxi)
Must not drive and must notify DVLA ³	Must not drive and must notify DVLA ³
Driving is not usually licenced if the condition is severe and affects vision, even if treated ³	Driving is not usually licenced if the condition is severe and affects vision, even if treated ³
A consultant/specialist's opinion will be required by DVLA ³	A consultant/specialist's opinion will be required by DVLA ³
Driving may be licenced if the condition is mild, after a satisfactory medical report ³	Driving may be licenced if the condition is mild, after a satisfactory medical report ³
Control with botulinum toxin may lead to licensing providing no other disqualifying side effects such as uncontrollable diplopia are induced ³	Control with botulinum toxin may lead to licensing providing no other disqualifying side effects such as uncontrollable diplopia are induced ³
DVLA should be informed of any change and any deterioration in condition must be notified ³	DVLA should be informed of any change and any deterioration in condition must be notified ³

TABLE 5: Driving and blepharospasm

Category	Description	Usage	Transmission %	Driving
0	Clear or very light tint	Indoor or overcast	80 – 100%	No limitations ⁷
1	Light tint	Low sunlight	44 – 79%	Not suitable for night driving ⁷
2	Medium tint	Medium Sunlight	19 – 43%	Not suitable for night driving ⁷
3	Dark tint	Bright sunlight	9 – 18%	Not suitable for night driving ⁷
4	Very dark tint	Very bright sunlight	3 – 8%	Not suitable for day or night driving ⁷

TABLE 6: Tint categories and suitability for driving

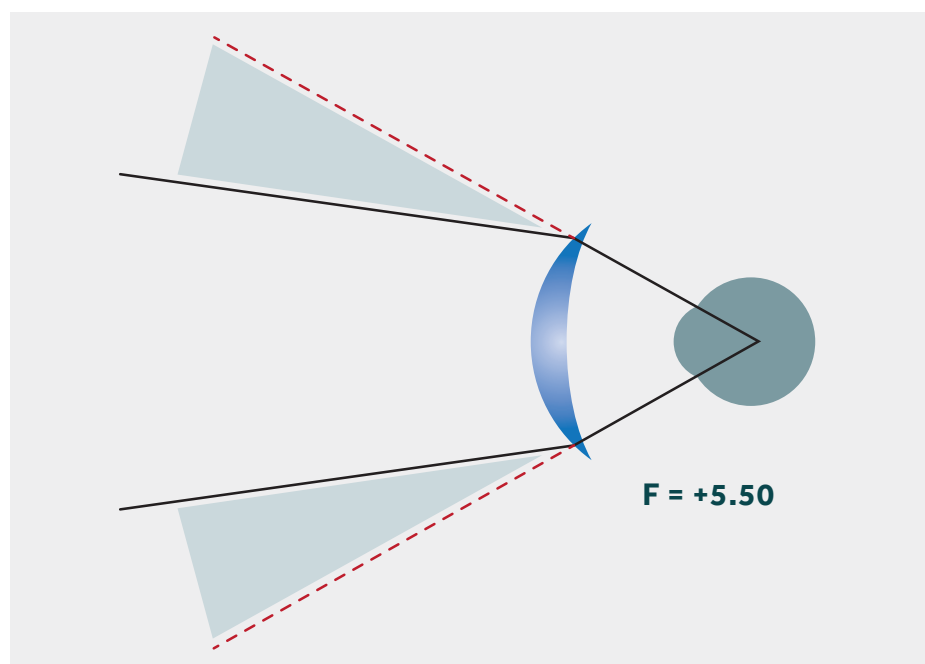


FIGURE 1: Ring scotoma in high hyperopia



CASE STUDY ONE: HGV DRIVER

Rob is 42 and holds a Group 2 licence for his full-time occupation as an HGV driver. His next licence review is due three years from now when he is 45.

He presents today for a routine eye examination and mentions tired eyes and sometimes a light headache towards the end of the day. He also feels he is getting more glare from lights at night than he used to.

HABITUAL Rx

RIGHT EYE	+7.75	6/7.5-2
LEFT EYE	+7.00	6/9

NEW Rx BVD 11mm

RIGHT EYE	+8.25	6/6-2
LEFT EYE	+7.50	6/7.5-2

He is issued a new prescription to get some new spectacles, which he orders right away.

REFLECTION

Reflect on the information provided and consider what Rob needs to do regarding the DVLA, considering the following points:

- Does he need to declare this change immediately, or can it wait until his next licence review?
- If he declares it now, what will happen?
- Can he wear contact lenses instead?
- Is there anything else that can be done?
- Why does this limit of +8.00 apply?

FEEDBACK

Rob needs to declare this to the DVLA immediately. His licence will be revoked. He can wear contact lenses for work as long as he meets the standard, but must always wear them and can't work if he is unable to. The prescription limit applies to the dispensed spectacles rather than the prescribed prescription. If vertex distance can be sufficiently increased on a borderline case, then the dispensed prescription could be within the standard. Ring scotoma (**Figure 1**) demonstrates the reduction in visual field that occurs in high plus lenses.



CASE STUDY TWO: TAXI DRIVER

Fatima is 52 and is a taxi driver who has presented today for a routine eye examination. It is five years since her last one, and she feels her vision has declined over the last six months.

Fatima has a parent with glaucoma and has been previously diagnosed with the condition herself in her right eye, which is managed with drops. There is no glaucoma in the left eye – but today she has been informed during her eye examination that she has posterior subcapsular cataracts in both eyes. She has been prescribed a new prescription.

HABITUAL Rx

RIGHT EYE	-5.50	6/9	Add +1.00
LEFT EYE	-4.50	6/9-2	Add +1.00

NEW Rx BVD 12mm

RIGHT EYE	-6.00	6/7.5	Add +2.00
LEFT EYE	-5.00	6/7.5 Binoc. VA 6/6-1	Add +2.00

REFLECTION

Reflect on the information provided and consider what Fatima needs to do regarding the DVLA, considering the following points:

- Does she need to notify the DVLA of her new diagnosis or the existing one?
- If she were to declare it now, what will happen?
- As well as dispensing her with new spectacles, are there any other recommendations you would make?

FEEDBACK

Taxi drivers are licenced by the local authority and are often (but not always) Group 2. If this is the case, Fatima needs to notify the DVLA of her glaucoma but not the cataracts. If she holds a Group 1 licence, she does not need to inform them of anything as long as she meets the required standards. If she holds a Group 2 licence and notifies the DVLA, she will not have her licence revoked as long as she continues to meet the standards.

Fatima needs to have the new prescription dispensed, and she needs to attend more regularly for her eye examinations, based on the recall advised to the prescription information given. She also needs to return sooner than this if she feels her vision has changed. Fatima needs prescription sunglasses for driving, with a tint no darker than nine per cent transmission for using in bright conditions. Fatima could wear contact lenses.

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FURTHER READING

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TABLES 1-5 REPRODUCED FROM:
DVLA – *Assessing fitness to drive:*
A guide for medical professionals.

LEARNING OUTCOMES FOR THIS CPD ARTICLE

DOMAIN: Clinical Practice

5.3: *Be aware of current standards and requirements in relation to driving and vision, and apply this to the care you provide.*

7.1: *Obtain relevant patient information to enable appropriate advice to be provided in relation to vision and driving*

7.3: *Ensure an adequate understanding of the patient's health is considered in relation to driving requirements when dispensing*



CLINICAL PRACTICE

PAULINE BRADFORD is a contact lens optician with a wide range of experience in practice, in professional services and as a lecturer in optometry. Pauline is currently working as a speciality contact lens product specialist, takes part in contact lens practical exams for ABDO and carries out contact lens clinics.