

Scheduled and non-scheduled conditions

Assessment for conditions affecting the eyes

Categories
No categor

It is important that the medical board record the visual findings for both eyes showing visual acuity figures both before and after correction.

Should the customer attend for examination without spectacles which are normally worn or have been prescribed, the medical board has discretion either to adjourn or to decide the assessment on the balance of probability, after considering the customer's statement on the efficacy of any spectacles and their own clinical findings.

Visual impairment

Blindness, the loss of one eye and the loss of vision in one eye are conditions covered by the **prescribed degrees of incapacity**.

Otherwise, the affects of diminished:

- visual acuity: central vision, the vision you use to see detail
- visual field: how much you can see around the edge of your vision, while looking straight ahead.

are assessed as follows.

Visual acuity

This is customarily assessed using the Snellen Scale and comparing the finding to the table reproduced on the following page to determine the resulting percentage loss of faculty.

This table is customarily used by medical boards and Medical Appeal Tribunals to assess corrected visual acuity.

	5/6	5/6	5/9	5/9	5/12	5/18	5/24	5/36	5/60	4/60	3/60	NPL
6/6	0	0	2	3	4	6	9	12	20	23	25	30
5/6	0	0	3	4	5	7	10	14	22	24	26	32
6/9	2	3	4	5	6	8	12	16	24	26	28	34
5/9	3	4	5	6	7	10	14	19	26	29	32	37
6/12	4	5	6	7	8	12	17	22	28	32	36	41
5/18	6	7	8	10	12	16	20	25	31	35	40	45
6/24	9	10	12	14	17	20	25	33	42	47	52	57
6/36	12	14	16	19	22	25	33	47	60	67	75	80
6/60	20	22	24	26	28	31	42	60	80	85	90	95
4/60	23	24	26	29	32	35	47	67	85	92	95	97
3/60	25	26	28	32	36	40	52	75	90	95	100	100
NPL	30	32	34	37	41	45	57	80	95	97	100	100

Note 1: NPL = No perception of light

Note 2: These assessments are for defective vision without special features and are based on the visual defect as measured, after correction with glasses.

Visual acuity is measured using the 'Snellen scale'. A Snellen test usually consists of a number of rows of letters which get smaller as they are read down the chart.

On the Snellen scale, normal visual acuity is called 6 / 6, which corresponds to the bottom or second bottom line of the chart. If a person can only read the top line of the chart then this would be written as 6 / 60. This means they can see at 6 metres what someone with standard vision could see from 60 metres away.

The figures 6 / 60 or 3 / 60 are how the result of a Snellen test are written. The first number given is the distance in metres from the chart the person sits when they read it.

Usually this is a 6 (for 6 metres) but would be 3 if they were to sit closer to the chart, i.e. 3 metres away.

The second number corresponds to the number of lines that the person is able to read on the chart. The biggest letters, on the top line, correspond to 60. As they read down the chart, the numbers that correspond to the lines get smaller, i.e. 36, 18, 12, 9 and 6. The bottom line of the chart corresponds to the number 6. Someone with standard vision who can read to the bottom of the chart would have vision of 6 / 6.

See [Example 4](#).

Sometimes visual acuity is recorded in other notations e.g. logMAR or cycles per degree. These other notations can (with care) be converted to a Snellen fraction for comparison.

If acuity has been recorded using logMAR or cycles per degree the tables below can be used to approximate the Snellen fraction. Also available in the tables is a conversion from metric (UK standard) to Imperial (US standard) recording.

Note: tests which use logMAR or cycles per degree to record acuity may not be measuring the same type of visual acuity as a Snellen chart change test and conversions must be treated with caution.

Snellen equivalent	LogMAR	Cycles per degree (cpd)
6/12 (20/40)	0.3	15.0
6/18 (20/60)	0.5	10.0
6/24 (20/80)	0.6	7.5
6/36 (20/120)	0.8	5.0
6/48 (20/160)	0.9	3.75
6/60 (10/200)	1.0	3.0
6/72 (10/240)	1.1	2.5
6/90 (20/300)	1.2	2.0
6/120 (20/400)	1.3	1.5
6/150 (20/500)	1.4	1.2
6/180 (20/600)	1.5	1.0
6/240 (20/800)	1.6	0.75
6/360 (20/1200)	1.8	0.50
6/480 (20/1600)	1.9	0.28

Measurement

Visual acuity is typically measured monocularly rather than binocularly with the aid of an optotype chart for distant vision, an optotype chart for near vision, and an occluder to cover the eye not being tested.

The medical board may also occlude an eye by sliding a tissue behind the patient's eyeglasses, or instructing the patient to use his or her hand. This latter method is typically avoided in professional settings as it may inadvertently allow the patient to peek through his or her fingers, or press the eye and alter the measurement when that eye is evaluated.

1. Place the chart at 6 meters and illuminate to 480 lux at that distance.
2. If the patient uses glasses, then the test is performed using them. If they do not have their glasses with them then the test using a pinhole should be done.
3. Place the occluder in front of the eye that is not being evaluated. The first evaluated eye is the one that is believed to see less or the one the patient says that is seeing less.
4. Start first with the big optotypes and proceed to the smaller ones. The patient has to identify everyone on the line being presented and communicate it to the medical board doctor.
5. If the measurement is reduced (below 20/20) then the test using a pinhole should be done and register the visual acuity using the pinhole. Both measures should be registered, with and without using pinhole.
6. Change the occluder to the other eye and proceed again from the 4th step.
7. After both eyes have been evaluated in distant visual acuity, proceed to evaluate near visual acuity using a near vision chart at normal reading distance.

In some cases, binocular visual acuity will be measured, because usually binocular visual acuity is slightly better than monocular visual acuity.

Visual field

The normal horizontal visual field using both eyes is 170 degrees. Restriction in this is called tunnel vision. Possible causes of tunnel vision include:

- glaucoma
- some types of optic atrophy, e.g. tabes dorsalis
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- a
- retinal abnormalities, e.g. retinitis pigmentosa, choroido-retinitis
- acute ischaemia, e.g. migraine
- bilateral lesions of the anterior calcarine cortex
- laser photocoagulation for diabetic retinopathy

For the purposes of driving a private vehicle a field of 120 degrees is required so restriction to this degree would only attract a small percentage (2 to 5%). However those with severe tunnel vision restricted to around 20 degrees would attract an assessment of around 60 to 80%. These should be added to any assessment for decreased visual acuity.

Specific visual field defects