



BOWLS CANADA BOULINGRIN

2451 Riverside Drive, c/o House of Sport,
Ottawa, Ontario K1H 7X7

Tel: (613) 244 – 0021 Fax: (613) 244 – 0041
www.bowlsCanada.com facebook.com/BCBOfficial
twitter.com/BCBBowls

Certificate of Diagnosis for Visually Impaired Athletes

The person below is required to undergo Classification to compete in Bowls Canada Boulingrin competitions at the Provincial or National level. To assist the classification process a confirmation of the medical diagnosis is required and **must be** submitted to Bowls Canada Boulingrin at: **office@bowlsCanada.com**. **This form is to be completed by the bowler’s own eye care professional, who is familiar with the bowler’s vision impairment history.**

Note: This Medical Diagnosis form cannot be older than 24 months at the time of the athlete’s classification.

PERSONAL DETAILS OF BOWLER

FULL NAME: _____

ADDRESS: _____

TELEPHONE NO: _____ DATE OF BIRTH: _____

MALE \ FEMALE\OTHER: _____

APPLICANT’S SIGNATURE: _____

(consenting for doctor to release information to Bowls Canada Boulingrin including classifiers who are required to review the material in order to determine eligibility)

MEDICAL DETAILS

The examination and evaluation must be performed by a Registered Ophthalmologist or a Registered Optometrist and requires the best corrected visual acuity and field of vision measurements in each eye. **The following pages must be used to perform the examination and evaluation.**

Auto refractor results: Attached _____ YES _____ NO

If no, record Right Eye: _____ Left Eye: _____

Vision diagnosis: _____

Progressive: _____ YES _____ NO First Diagnosed in Year: _____

Medication (vision only): _____

Optical aids used in competition: _____ Spectacles _____ Contact Lenses _____ Sun Glasses

Visual Acuity – FINAL Specify Measurement Method (type of chart): _____

With Correction: _____ Right Eye _____ Left Eye _____ Binocular

Without Correction: _____ Right Eye _____ Left Eye _____ Binocular

Correction used for VA: _____ Glasses _____ Contact lenses _____ Trial Lenses _____ Unaided

Prescription/Correction details:

Right Eye: Sph. _____ Cyl. _____ Axis _____ Left Eye: Sph. _____ Cyl. _____ Axis _____

Visual Field – widest diameter in degrees _____ Test used: _____

Attached Fields: _____ YES _____ NO Diameter: _____ Right Eye _____ Left Eye

Comments and Observations:

I HEREBY CERTIFY THAT I HAVE FOLLOWED THIS PATIENT FOR _____ YEARS AND CERTIFY THAT THE ABOVE NAMED PATIENT HAS THE DIAGNOSIS SPECIFIED ABOVE AND IS ABLE TO PARTICIPATE IN THIS SPORT.

NAME: _____ DATE: _____

(print name)

MEDICAL SPECIALTY: _____ REGISTRATION NUMBER: _____

SIGNATURE OF MEDICAL PRACTITIONER: _____

Athlete Consent

I, (Name/Print): _____ authorize BCB to collect and use personal information about me for the purposes described in BCB's Privacy Policy. I understand that I may withdraw such consent at any time by contacting BCB's Privacy Officer. The Privacy Officer will advise the implications of such withdrawal.

Applicant's Signature: _____

Note: Information disclosed on this form will be dealt with according to BCB/IBD/IPC code of ethics for classification and the Canadian Blind Sports for purposes of administration of vision classification.



BOWLS CANADA BOULINGRIN

2451 Riverside Drive, c/o House of Sport, Ottawa, Ontario K1H 7X7 Tel:
(613) 244 – 0021 Fax: (613) 244 – 0041
www.bowlsCanada.com

VISUAL CLASSIFICATION OF VISUALLY IMPAIRED BOWLERS (FOR CLASSIFIERS ONLY)

Important Notes to Assessor:

1. The visual assessment must be performed by an Ophthalmologist or a Registered Optometrist and requires the following documentation to be completed in FULL:
 - **LogMAR TABLES 1 & 2: RIGHT eye unaided & aided visual acuity plus LEFT eye unaided & aided visual acuity**
 - **TABLE 3: CLASSIFICATION FORM**
2. In all sight tests i.e. visual acuity and visual field, EACH eye must be tested individually.
3. Classification of the athlete will be made by the appointed Chief Classifiers after all documentation has been submitted and assessed.

VISUAL ACUITY

1. Visual Acuity measurements should be verified using one or more of the following options:
 - Grating Acuity(GA) Cards or Basic Vision Test Cards from the Berkeley Rudimentary Vision Test (BRVT) if the athlete is severely visually impaired
 - Single **Tumbling “E” (STE) CARDS** from the Berkeley Rudimentary Vision Test (BRVT)
 - LogMAR **Tumbling “E” EDTRS ACUITY CHART (LMC)** if better visual acuity
2. See notes on Page 2 for Guidelines for Acuity Testing
3. **PAY PARTICULAR ATTENTION TO THE CRITICAL DIVIDING LINES USED IN THE CLASSIFICATION SYSTEM** by using repeated measurements **all** of which must be recorded by placing a cross in the appropriate blocks. A minimum of **5 readings** are required **per eye** (if results are inconsistent and show more than 0.2 log MAR difference – allow athlete to rest and repeat with more readings).
4. Athlete classification is divided into the following classes as noted by the various shadings:
 - Limit B1** - unable to recognize single tumbling E 100M at 25cm (LogMAR 2.6 is out)
 - **The STE is the task used to determine B2/B1 boundary**
 - Limit B2** – unable to recognize single tumbling E 25M at 1m (LogMAR 1.4 is out)
 - **The STE is the task used to determine the B3/B2 boundary and confirmed with LogMAR ACUITY CHART (big)**
 - Limit B3** – unable to recognize the LogMAR 0.9 on the chart = 32M LogMAR chart at 4meters (LogMAR 0.9 is out)
 - **LogMAR ACUITY CHART is MANDATORY to determine “good VA” border of the B3 range(boundary B3/B4)**
 - Limit B4** – **able to recognize LogMAR 0.9 on the chart up to 0.6 LogMar on the chart TOGETHER with a field of vision of less than 20 deg in diameter (LogMAR 0.5 is out)**
 - **LogMAR ACUITY CHART is MANDATORY to determine VA borders of the B4 range (Boundary B4/NE)**

VISUAL FIELD

1. Visual field shall mean the total visual field and shall be taken as the maximum sum of the fields about the point of fixation along any line through the point of fixation (e.g. temporal plus nasal or upper plus lower), whichever produces the largest result.
 2. The visual field should be measured with a perimeter that **is able to record degrees of field**. However, if the fields are reduced to **20 degrees or less** the visual field can be assessed with an Amsler Grid Test.
 3. For Amsler grid testing, the player should be corrected for a working distance of 33cm (add or accommodate +3.00D); the grid is held at 33cm and the player fixates monocularly on the central fixation spot. A target is moved from the edge of the grid towards the fixation spot until it is identified by the player – repeat in all the primary positions or more if needed. Each block is equivalent to one degree when testing at 33cm.
 4. If any other visual field test (e.g. Goldman Perimeter stimulus III/4e, Humphrey Field Analyzer 10DB or Octopus) is used the results must be able to specify the degree of attainable field and must accompany the application form. Please specify the method(s) used in the space provided on the Classification Form.
 5. **NOTE: FOR INTERNATIONAL EVENTS THE FIELD OF VISION MUST BE MEASURED USING AN AUTOMATED FIELD ANALYZER AND MUST ASSESS THE FULL VISUAL FIELD (80 DEGREES). RESULTS MUST BE SUBMITTED.**
-



BOWLS CANADA BOULINGRIN

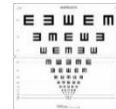
2451 Riverside Drive, c/o House of Sport, Ottawa, Ontario K1H 7X7 Tel: (613) 244 – 0021 Fax: (613) 244 – 0041
www.bowlscanada.com

GUIDELINES FOR ACUITY TESTING USING BERKLEY RUDIMENTARY VISION TEST (BRVT): STE and big LMC

- Acuity must be measured in the Right eye AND the Left eye – unaided & repeated with best obtainable visual correction
- VA measurements need to be made **using different distances and several different Tumbling E sizes**. Results must be recorded by placing a cross in the appropriate blocks on the **LogMAR TABLES 1 & 2**. Results should be consistent - range of **variability** should NOT be more than **0.2 LogMAR**.
- For **each eye, at least 5 measurements** should be determined with no fixed procedure for letter sequence and distances used.
- If there is a significant inconsistency (range bigger than 0.2 LogMAR) then more distances and sizes need to be tested. Allow the athlete to rest and repeat measurements.

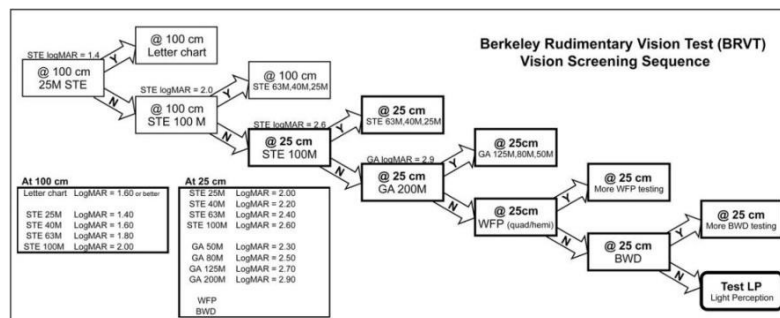
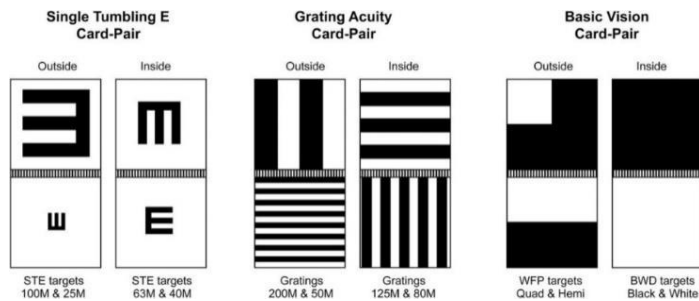
It is recommended to start at **1 meter** with a **100M Single Tumbling E (STE)** card-pair

- If the orientation of the **100M STE** can be readily recognized at 1m, increase the working distance until difficult to recognize – record the **greatest working distance** that the athlete is able to correctly identify the 100M STE.
- Repeat the above procedure with the 63M, 40M and 25M STE cards recording results for each letter size at the appropriate distance.
- Whenever the STE measurements are 1.0 LogMAR or better, the **big LogMAR CHART (LMC) must be used**. Athlete is to identify orientation of the optotypes across each row without isolating – end point is when at least 3 (or more) of the 5 optotypes per row are answered correctly:



If the 100 M Single Tumbling (STE) cannot be recognized at 1 meter:

Reduce the viewing distance to **25 cm** and vary the STE card size – record the smallest STE size at the 25cm working distance that the athlete can correctly identify. Use Grating Charts Acuity Cards or Basic Vision Cards at 25cm if necessary - see table below with testing sequence when severely visually impaired



For more information, please contact Bowls Canada at office@bowlscanada.ca



BOWLS CANADA BOULINGRIN

2451 Riverside Drive, c/o House of Sport, Ottawa, Ontario K1H 7X7
 Tel: (613) 244 – 0021 Fax: (613) 244 – 0041
 www.bowlscanada.com

TABLE 1 : UNAIDED VA RIGHT EYE – 3 readings minimum OR 5 readings if no refractive error

25cm		25 cm	Distance	25 cm	50 cm	80 cm	1 m	1,25 m	1,60 m	2,00 m	2,50 m	3,20 m	4,00 m	5,00 m	6,30 m
Basic Vision ↓	Gratings ↓	Log MAR	E's ↓	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR
NLP	200M	2.9	100M	2.6	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2
LP	125M	2.7	63M	2.4	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0
BWD	80 M	2.5	40M	2.2	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8
WFP	50 M	2.3	25M	2.0	1.7	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6
	B1	B2	CLASS	B2	B2	B2	B3	B3	B3	B3	B3	B3	B4	B4	B4

BEST CORRECTED VA RIGHT EYE – 5 readings MINIMUM

25cm		25 cm	Distance	25 cm	50 cm	80 cm	1 m	1,25 m	1,60 m	2,00 m	2,50 m	3,20 m	4,00 m	5,00 m	6,30 m
Basic Vision ↓	Gratings ↓	Log MAR	E's ↓	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR
NLP	200M	2.9	100M	2.6	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2
LP	125M	2.7	63M	2.4	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0
BWD	80 M	2.5	40M	2.2	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8
WFP	50 M	2.3	25M	2.0	1.7	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6
	B1	B2	CLASS	B2	B2	B2	B3	B3	B3	B3	B3	B3	B4	B4	B4
													Visual field <20deg diameter	Yes No	

OR use Log MAR Chart (LMC) for B3 / B4 border: 5 READINGS MINIMUM

Letter Sizes in M-units	100cm	125cm	160cm	200cm	250cm	320cm	400 cm	400cm
	+0.6	+0.5	+0.4	+0.3	+0.2	+0.1	0	0.0
	LogMAR	LogMAR	LogMAR	LogMAR	LogMAR	LogMAR	LogMAR	LogMAR
40M	1,6	1,5	1,4	1,3	1,2	1,1	1,0	1,0
32M	1,5	1,4	1,3	1,2	1,1	1,0	0,9	0,9
25M	1,4	1,3	1,2	1,1	1,0	0,9	0,8	0,8
20M	1,3	1,2	1,1	1,0	0,9	0,8	0,7	0,7
16M	1,2	1,1	1,0	0,9	0,8	0,7	0,6	0,6
12.5M	1,1	1,0	0,9	0,8	0,7	0,6	0,5	0,5
10M	1,0	0,9	0,8	0,7	0,6	0,5	0,4	0,4
8M	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,3
6.3M	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,2
5.0M	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,1
4.0M	0,6	0,5	0,4	0,3	0,2	0,1	0,0	0,0
3.2M	0,5	0,4	0,3	0,2	0,1	0,0	-0,1	-0,1
2.5M	0,4	0,3	0,2	0,1	0,0	-0,1	-0,2	-0,2
2.0M	0,3	0,2	0,1	0,0	-0,1	-0,2	-0,3	-0,3

Athlete name: _____ Date _____



BOWLS CANADA BOULINGRIN

2451 Riverside Drive, c/o House of Sport, Ottawa, Ontario K1H 7X7
 Tel: (613) 244 – 0021 Fax: (613) 244 – 0041
 www.bowlscanada.com

TABLE 2 : UNAIDED VA LEFT EYE – 3 readings minimum OR 5 readings if no refractive error

25cm		25 cm	Distance	25 cm	50 cm	80 cm	1 m	1,25 m	1,60 m	2,00 m	2,50 m	3,20 m	4,00 m	5,00 m	6,30 m
Basic Vision ↓	Gratings ↓	Log MAR	E's ↓	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR
NLP	200M	2.9	100M	2.6	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2
LP	125M	2.7	63M	2.4	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0
BWD	80 M	2.5	40M	2.2	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8
WFP	50 M	2.3	25M	2.0	1.7	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6
	B1	B2	CLASS	B2	B2	B2	B3	B3	B3	B3	B3	B4	B4	B4	B4

BEST CORRECTED VA LEFT EYE – 5 readings MINIMUM

25cm		25 cm	Distance	25 cm	50 cm	80 cm	1 m	1,25 m	1,60 m	2,00 m	2,50 m	3,20 m	4,00 m	5,00 m	6,30 m
Basic Vision ↓	Gratings ↓	Log MAR	E's ↓	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR	Log MAR
NLP	200M	2.9	100M	2.6	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2
LP	125M	2.7	63M	2.4	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0
BWD	80 M	2.5	40M	2.2	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8
WFP	50 M	2.3	25M	2.0	1.7	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6
	B1	B2	CLASS	B2	B2	B2	B3	B3	B3	B3	B3	B4	B4	B4	B4

Visual field <20deg diameter	Yes
	No

OR use Log MAR Chart (LMC) for B3 / B4 border: 5 READINGS MINIMUM

Letter Sizes in M-units	100cm	125cm	160cm	200cm	250cm	320cm	400 cm	400cm
	+0.6	+0.5	+0.4	+0.3	+0.2	+0.1	0	0.0
	LogMAR	LogMAR	LogMAR	LogMAR	LogMAR	LogMAR	LogMAR	LogMAR
40M	1,6	1,5	1,4	1,3	1,2	1,1	1,0	1,0
32M	1,5	1,4	1,3	1,2	1,1	1,0	0,9	0,9
25M	1,4	1,3	1,2	1,1	1,0	0,9	0,8	0,8
20M	1,3	1,2	1,1	1,0	0,9	0,8	0,7	0,7
16M	1,2	1,1	1,0	0,9	0,8	0,7	0,6	0,6
12.5M	1,1	1,0	0,9	0,8	0,7	0,6	0,5	0,5
10M	1,0	0,9	0,8	0,7	0,6	0,5	0,4	0,4
8M	0,9	0,8	0,7	0,6	0,5	0,4	0,3	0,3
6.3M	0,8	0,7	0,6	0,5	0,4	0,3	0,2	0,2
5.0M	0,7	0,6	0,5	0,4	0,3	0,2	0,1	0,1
4.0M	0,6	0,5	0,4	0,3	0,2	0,1	0,0	0,0
3.2M	0,5	0,4	0,3	0,2	0,1	0,0	-0,1	-0,1
2.5M	0,4	0,3	0,2	0,1	0,0	-0,1	-0,2	-0,2
2.0M	0,3	0,2	0,1	0,0	-0,1	-0,2	-0,3	-0,3

Athlete name: _____ Date: _____