BOWLS CANADA BOULINGRIN

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

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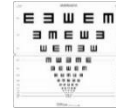
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GUIDELINES FOR ACUITY TESTING USING BERKLEY RUDIMENTARY VISION TEST (BRVT): STE and big LMC

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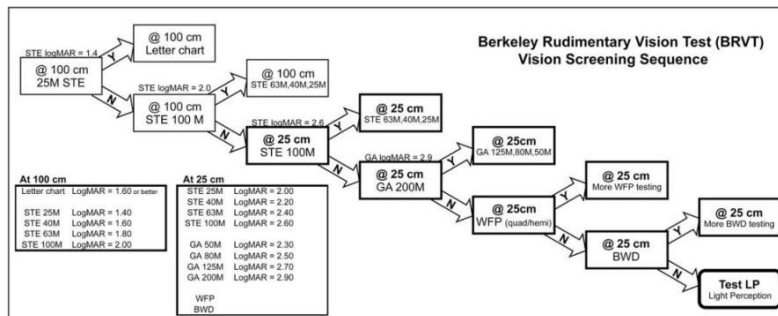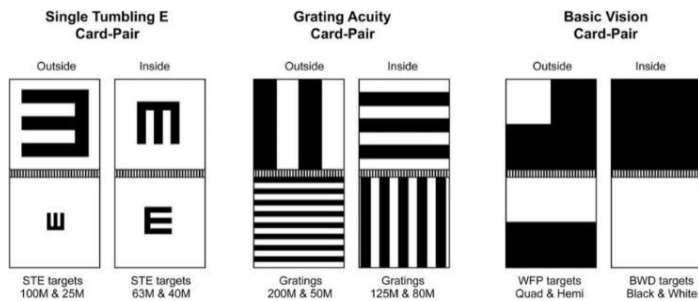
It is recommended to start at **1 meter** with a **100M Single Tumbling E** (STE) card-pair

- 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

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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	B4	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	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 +0.6 LogMAR	125cm +0.5 LogMAR	160cm +0.4 LogMAR	200cm +0.3 LogMAR	250cm +0.2 LogMAR	320cm +0.1 LogMAR	400 cm 0 LogMAR	400cm 0.0 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**_____

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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 +0.6 LogMAR	125cm +0.5 LogMAR	160cm +0.4 LogMAR	200cm +0.3 LogMAR	250cm +0.2 LogMAR	320cm +0.1 LogMAR	400 cm 0 LogMAR	400cm 0.0 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**_____