MYOPIA GUIDELINES



ABOUT MYOPIA GUIDELINES

BHVI's Guidelines for Myopia Management, are an easy-to-use, practical tool developed to assist the busy eyecare professional in managing patients with myopia. They are a vital addition to myopia management in your practice.

Incorporating the latest evidence-based knowledge, the Guidelines are designed to help you assess and establish the best possible treatment pathway for your patients.

The step-wise approach includes:

- Initial consultation
- Assessment of risk for onset and progression
- Management strategies
- Follow-up

For free access to the Guidelines for Myopia Management from your smartphone, tablet or desktop, go to:

bhvi.org/myopia-calculator-resources/myopia-resources/



INITIAL CONSULTATION

- History (including age, gender, family history, age of onset, progression, previous myopia control, near work, outdoor time, other ocular and general health history)
- Visual acuity (uncorrected, best corrected)
- Binocular vision
- Anterior eye examination*
- Intraocular pressure*
- · Objective/subjective cycloplegic refraction
- Fundus examination*
- Optional: Axial length measurement, corneal topography*



^{*} Rule out secondary myopias - e.g. keratoconus, syndromic associations



ASSESSMENT OF RISK

INCREASED RISK OF ONSET

- Parental myopia (One or both parents)
- Near work (Excessive Greater risk when reading <20cm and for continuous periods (>45min))
- Ethnicity (East Asian)
- Outdoor time (<2 hours per day)
- Refractive Error (More myopic than age normal or progression worse than -0.75D / yr)

To estimate risk of progression in myopic eye, visit bhvi.org/myopia-calculator

INCREASED RISK OF PROGRESSION

- Age (9 yrs or less)
- Parental myopia (One or both parents)
- Ethnicity (East Asian)
- Refractive Error (More myopic than age normal or progression worse than - 0.75D / yr)





MANAGEMENT

NO MYOPIA

REDUCE RISK

- Increase time outdoors (2+ hours)
- Frequent breaks from near work (break every 30 min)
- Consider early myopia management if high risk and lower than expected hyperopia for age[^]



MYOPIA*

CHOOSING A MYOPIA CONTROL STRATEGY: CONSIDER

- Patient suitability
- Patient/carer preference
- · Access to strategy

- Risk of progression
- Effectiveness of strategy
- · Safety, compliance and cost

MYOPIA CONTROL

- · Contact lenses
 - Multifocal-like
 - Extended depth of focus
- Orthokeratology
- Progressive addition spectacles

- Executive bifocals
- Peripheral defocus spectacles HAL, DIMS, DOT spectacles
- Atropine (low-dose)
- Combination (e.g. low does Atropine with orthokeratology)
- * Fully correct based on cycloplegic refraction; myopia control should be a priority. Use BHVI's myopia calculator (bhvi.org/myopia-calculator) to determine benefit with myopia control.
- ^ <u>Gifford et al (2019) IMI Clinical Management Guidelines Report. Invest. Ophthalmol. Vis. Sci. 2019;60(3):M184-M203</u>

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FOLLOW-UP*

1 DAY 1 WEEK 1 MONTH 3 MONTHS 6 MONTHS 12 MONTHS



• Atropine (low-dose)



- · Contact lenses:
 - Multifocal-like
 - Extended depth of focus



Orthokeratology



- Executive bifocals
- Peripheral defocus spectacles HAL, DIMS, DOT spectacles

PROCEDURES

- · Updated history
- · Best-corrected visual acuity
- · Over-refraction
- Anterior eye examination (with lid eversion)
- Corneal topography (as needed for Ortho K)

- Pupil size/response to light (as needed for atropine)
- Intraocular pressure
- Objective/subjective cycloplegic refraction (6 monthly)
- Fundus examination (annually)
- Axial length measurement if possible (at baseline and every 6 months)
- 1. If progression not slowed → Check lens prescription/fit → Check compliance → Consider changing treatment power/design or treatment mode.
- 2. If myopia is stable for at least two years and if the individual is at age when risk for progression is minimal, can consider ceasing myopia control.
 - For the first year especially for children and progressing myopes. Further follow-up schedule may be modified based on patient progress, treatment modality and performance.

MYOPIA CALCULATOR

The Myopia Calculator illustrates the impact of various myopia management strategies on the amount of myopia progression in a child. It is free for you to use, helps support patient and parent communications and improves treatment compliance in an area that eyecare professionals can find challenging. Its key features include:

- Visual display of data
- · Tailored to your patient through age, ethnicity and refractive error
- Recommended management options
- Easy to use

It is a must-have for practitioners.

To access the Myopia Calculator, go to: bhvi.org/myopia-calculator

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Disclaimer: These Guidelines are to be treated as information of a general nature and do not constitute advice. With research on the management of myopia continuously developing, Brien Holden Vision Institute Limited does not guarantee that the information now in these Guidelines is correct or will apply in the future. Brien Holden Vision Institute Limited makes no warranties or express or implied representations whatsoever regarding the accuracy, completeness, timeliness or usefulness of the information contained or referenced in these Guidelines. Brien Holden Vision Institute Limited does not assume any risk whatsoever for the individual user and/or the healthcare professional's use of the information contained herein.

