

MYOPIA MOMENT CHILDREN AT RISK

This Myopia Moment provides a brief overview of the importance of managing myopia and highlights some of the risk factors to look out for to assist with identifying a child that may develop the condition. Please refer to the source references for more details.

WHY SHOULD WE WORRY ABOUT MYOPIA IN CHILDREN?

Several studies have confirmed a link between myopia and serious eye health problems later in life.

The table highlights how the severity of myopia increases the risk of ocular morbidity. For example, the risk of developing cataracts doubles for myopes with a prescription between -1.00D and -3.00D – and that risk grows as the prescription strengthens.

(Emmetropia = 1x)	Cataract (PSCC)	Glaucoma	Retinal Detachment	Myopic Maculopathy
-1.00 to -3.00	2 x	2 x	3 x	2 x
-3.00 to -6.00	3 x	3 x	10 x	10 x
-6.00 or greater	5 x	14 x	22 x	41 x

AGE: YOUNGER AGE OF ONSET

- The earlier that myopia emerges, the greater the risk of progression to a higher prescription.
- A child is at risk of developing myopia if their refractive error is less hyperopic than expected for their age.
- Normal refractive error expected for a child's age is influenced by ethnicity.

LIFESTYLE: OUTDOOR TIME AND SCREEN TIME

- Children who spend little time outdoors appear to be at greater risk of developing myopia.
- Significant amount of time spent using electronic devices also appears to be a risk factor, however, studies showing a connection vary.

GENETICS: MYOPIC PARENT(S) AND ETHNICITY

- The presence of myopia in one parent increases the risk of myopia in the child. That risk further increases if both parents are myopic.
- Even if both parents are non-myopic, their child may still develop myopia.
- Children of East Asian descent have a higher risk of developing myopia in comparison to other ethnic groups.

OTHER VISION DISORDERS

Vision disorders such as reduced accommodative responses, increased accommodative lag, and higher AC/A ratios are frequently found in patients who have myopia.

However, current research evidence does not suggest a role for these vision disorders in the development or progression of myopia at this point in time.