Partners for
Pediatric Vision
Keeping Kids in Sight

Dilation of the Eye

What are Dilating Eye Drops?

Dilating eye drops consist of a medication that allows the pupil of the eye to enlarge, letting more light to enter the eye. Your optometrist will then be able to see the back of the eye more clearly. Generally, the child leans their head back and the drops are quickly placed into the eyes. The excess is wiped dry. Generally, the drops may sting when first put into the eye, but this should subside fairly quickly. You may opt to have a numbing eye drop be put in first to reduce any pain. The child and family go out to the waiting area or stay in the exam room while they wait for the drops to work (about 25 minutes).

Why is Dilation Important?

Dilation of the eyes is necessary for two purposes: first, it allows us to check for abnormalities inside the eye; second, and more importantly for children, it relaxes their focusing which helps us determine the most appropriate glasses prescription.

Results from Pediatric Vision Research:

In 1994 the National Institutes of Health and the National Eye Institute, funded the Vision in Preschoolers (VIP) Research Study, to study childhood vision problems and determine how to detect problems most effectively. VIP confirmed the importance of the use of dilating eye drops for pediatric eye exams, by noting:

1. **Detection of vision disorders**: Even the most experienced pediatric ophthalmologists and optometrists in the multi-center study missed detecting, at least 10% of the time, significant degrees of hyperopia (farsightedness) and amblyopia (lazy eye) – the two leading causes of vision problems in young children. Less experienced eye doctors who do not specialize in the care of young children will potentially miss more. *Dilating eye drops minimize this failure to detect*.

2. **Eye exam thoroughness**: It is impossible to view more than 15% of the inside and back of the child's eye without dilating the pupil. *Use of dilating eye drops allows a thorough viewing of the inside of the eye* by the eye doctor, so eye health and a wide range of ocular and systemic disorders can be assessed.

3. **Non-verbal and young children:** Young children cannot verbally provide a clear and accurate description of their vision problems, and are frequently unaware of the presence of those problems. Objective (not subjective) testing procedures, without having the child provide typical eye exam answers like "which is better, one or two", is necessary. *Eye drops are essential in this task*.

Older Children: For older children, the use of dilating drops ensures that the exam is accurate, the eyes and health have been thoroughly and objectively examined, and treatment, including glasses, is prescribed to the best corrected vision.

U.S.A. Standard of Care: The use of dilating drops is the "standard of care" in all health care guidelines established by ophthalmology, optometry, public health, and insurance companies, and is expected by pediatricians, public health and public policy authorities throughout the U.S.A.

How will the drops affect the child?

The pupils will generally be larger for several hours. In very rare cases the dilation might last into the next day. This is a normal reaction and depends upon the type of eye drops used and the color of the child's eyes. The vision may be blurred at near for a few hours, but rarely the next day. Most children are not affected very much and continue to function well in class.

Drops can feel slightly uncomfortable for a few seconds, or there may be sensitivity to bright light. Disposable sunglasses are given to all young children who might be playing outside that day. With the exception of some older children (over 10 years of age), reading smaller print does not create much of a problem afterwards. Young children in preschool seem to be affected very little.