

Spot Vision Screener technology is changing the way routine vision screening is done.

Policy Guidelines strongly recommends Instrument-based vision screening
The American Academy of Pediatrics (AAP) supports instrument-based vision screening as an alternative to visual acuity testing with eye charts (snellen chart, optotypes). These techniques have better success after 12 months of age and can be repeated at each annual preventative medicine encounter through 5 years of age or until visual acuity can be assessed reliably.

6 mos - 3 yrs (pre-verbal)

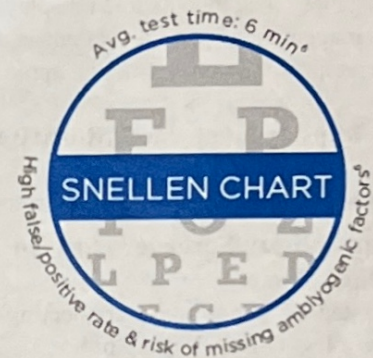
Ideal stage to detect amblyopic precursors.

4-8 yrs (asses school readiness)

Final opportunity to detect amblyopic conditions through refractive measurements.

9-15 yrs (adolescence)

Changes in vision are common as the body grows; 1 in 4 children in this stage have a vision issue.



One study has shown Snellen acuity measures in older children resulted in a 21% under-referral rate

Spot Vision Screener

can screen for and detect six amblyopic risk factors in children as young as 6 months

- Myopia (nearsightedness)
- Hyperopia (farsightedness)
- Astigmatism (blurred vision)
- Anisometropia (unequal refractive power)
- Strabismus (eye misalignment)
- Anisocoria (unequal pupil size)





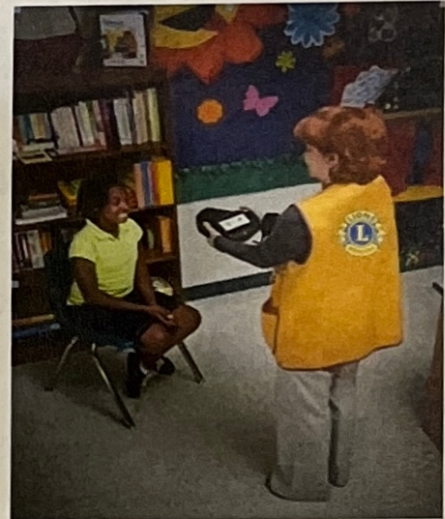
What is Spot?

Spot is a fast, portable, easy to use vision screening system designed to quickly detect several vision issues in children as early as 6 months to adults. The device captures in one second or less, which makes screening efficient and especially effective with young, non-verbal children.

How is it used?

The child simply sits down and looks into the front of the camera, focusing their vision on its blinking red, amber and blue lights-a "chirping bird" auditory cue can also be used to attract the attention of young children. It then takes the series of photos of the child's eyes using infrared light, all within no more than one second.

By analyzing those images, it is able to determine if their vision is "in range" or "out of range." Should a child fall into the "out" category, a screen on the device will instantaneously display the name of any likely problems.



How does it work?

Spot is a computer assisted Photorefractor, or known as an autorefractor, which uses low level infrared light to the retina, taking 23 camera shots of the eye in 1 second.

The measuring principle is based on photo-retinoscopy. From a distance of three feet (the camera lets the screener know if the distance is too far away or too close), an infrared light is projected through the pupils onto the retina. Depending on the refractive error, the reflected light forms a specific brightness pattern within the pupil. The assessment is non-invasive and the student feels nothing.