

STLS Sensory Service

Astigmatism

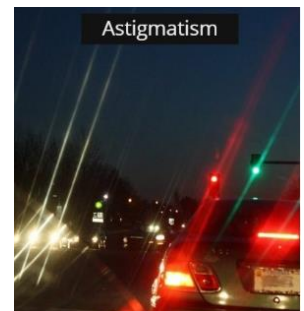
Here is some information and strategies to help schools meet the needs of children with astigmatism. The needs of children and young people with astigmatism can be met through Quality First Teaching and simple strategies used in the classroom. In the majority of cases these children and young people do not require specialist interventions from a Qualified Teacher for Visual Impairment. The information in the universal section of the Mainstream Core Standards for VI will also be useful.

What is astigmatism?

Astigmatism, along with short- and long-sight, is the main cause of blurry vision. Most people who wear glasses for long or short sight also have a slight correction for astigmatism – they may notice that one lens of their glasses appears slightly thicker.

Astigmatism means the cornea, at the front of the eye, is shaped more like a rugby ball than a football. The cornea and lens have the job of focusing light. The cornea does most of the work. It refracts the light rays, which then go through the lens, which finely adjusts the focusing. So, if the cornea is uneven and not completely round, then light is focused at more than one place in the eye. This lack of 'point focus' means that images received by the brain are blurred.

Image: © <https://www.insightvisioncenter.com/>



The two eyes are usually not affected in the same way, so the brain will compensate for the difference between the two eyes, although this can cause eye strain and headaches. Although astigmatism is very common (about 9 in 10 people have some degree of astigmatism), it does not always cause a problem.

How astigmatism may affect children

- blurred vision
- light sensitivity (photophobia)
- eye strain, headaches and fatigue (especially after long periods of concentration, such as when using a computer or viewing the whiteboard)
- difficulty seeing one colour against another (contrast)
- distorted images, such as lines which lean to one side
- severe astigmatism can cause double vision

Why astigmatism needs to be treated early?

When astigmatism occurs on its own, it is easily corrected by glasses. However, in children who are not significantly long- or short-sighted, astigmatism may sometimes be missed. This is important, because in young children, a high astigmatism may cause lazy eye. Medically known as amblyopia, this is a childhood condition where the vision does not develop properly, because one or both eyes are unable to build a strong link to the brain. It usually only affects one eye and means that the child can see less clearly out of the affected eye and relies more on the "good" eye. It's important this is spotted early so it can be treated.

There are some classroom strategies that can support children with astigmatism, however, its 'cure' is entirely dependent upon correctly prescribed glasses.

General Strategies

- Talk through work which is on the board or which is being demonstrated.
- Use precise language in order to give a clear verbal description wherever possible.
- Provide as many opportunities as possible for concrete learning through direct experience.
- Allow plenty of time for the visually impaired child to handle and explore everyday objects and to talk through their experiences.
- Make sure they fully understand the concepts they are trying to learn.
- Allow more time for the visually impaired child to complete tasks. It may sometimes be necessary to give them fewer tasks than their peers.
- If glasses are worn they should be worn all the time including at playtimes and for P.E.