



### **Visual Impairment**

Visual Impairment (VI) is the term used to refer to all levels of sight loss.

## **Types of Visual Impairment**

Sight is classified on more than one measure. Visual impairment can be broadly defined as a limitation in one or more functions of the eye or visual system, most commonly impairment of visual acuity (sharpness or clarity of vision), visual fields (the ability to detect objects to either side or above or below the direction in which the person is looking), contrast sensitivity and colour vision.

#### Visual acuity

A persons' ability to see fine detail e.g. reading text. It is often tested by reading down an eye chart.

#### Visual field

The boundaries of what a person can see in one instant, i.e. the entire area which can be seen without moving the eyes.

## No light perception

When no information is detected by the eye or the brain is prevented from processing any information it gets from the eye e.g. Optic Atrophy.

The following are general categories of visual impairment:

# Sight impaired (partially sighted)

- People with a visual impairment in this category may or may not be able to see print.
- They may not be able to recognise you from a distance when you greet them at the start of a session.
- They may not be able to see your demonstration due to light conditions or their position in relation to you.

# Severely sight impaired (blind)

- People with a visual impairment in this category will often use braille to access text.
- They may not be able to see your demonstration.
- They may need support to orientate themselves correctly to ensure they are facing the correct direction.





- A VISIBLE DIFFERENCE THROUGH SPORT
- They may not know when they are standing too close to another person.
- They may become disorientated and need your voice to find the correct direction.
- They may need to run with a guide.

How sight is affected by a visual impairment varies greatly depending on its cause, and where in the eye(s) or brain the visual impairment occurs. The visual impairment can range from the total loss of sight, to a disturbance within the field of vision e.g. loss of vision from the lower half of your field of view, random loss (patchy) of vision from within the field of view or tunnel vision. The age or stage of onset that the visual impairment occurs will have an effect on the person's physical, psychological and emotional development.

### **Common Types Eye Conditions Resulting in Visual Impairment**

### **Nystagmus**

Nystagmus is an uncontrollable movement of the eye. The eyes appear to shake or oscillate. It is often associated with other visual impairments. Often there is an angle of sight at which the nystagmus is less. The result of this means that they may look indirectly at the point of interest, or leader/coach.

#### Albinism

Albinism is due to lack of pigmentation in the skin and/or eyes. This causes a reduced visual acuity. They are often photophobic (bright light causes discomfort). This is important to remember in brightly lit places or where the activity area is in direct sunlight.

## Retinoblastoma (Cancer of the eye)

The resulting visual impairment will vary depending on the size and position of the tumour, and whether one or both eyes are affected.

# Retinitis Pigmentosa (RP)

This is a genetic condition which affects both the field of vision (tunnel vision occurs) and the visual acuity. Night blindness may also occur. This is important to note when a person is expected to move from a poorly lit area, such as inside a building, to a well-lit area, such as a sunny park area; and vice-versa. In these instances the eyes will take much longer to adjust to new light levels leaving them temporarily blind in the new environment. Some forms of Retinitis Pigmentosa are progressive and the person will lose all sight over a period of time.





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The examples given above are all types of Ocular Visual Impairments, meaning the condition has affected part of the eye. Cortical Visual Impairments occur when the eye works perfectly and it is the processing of the information received from the eye that is at fault.

Some sight conditions also occur as part of a syndrome (a condition affecting more than one part of the body) For example Usher's Syndrome affects both hearing and sight. Stature and the heart are all affected in Alstrom's Syndrome.

## Colour confusion (also known as colour blindness)

Although it is not generally seen as a visual impairment, due to its relatively high incidence it is worth mentioning. This is when people see colours differently e.g. red green colour confusion occurs in 8% of males. It is found more commonly in males due to its genetic origin causing faults in the cones on the back of the eye. You may become aware of a person with colour confusion in tasks that are colour centred e.g. "run to the red post". An easy remedy to this situation is to ask the person to name the colour of the item you want them to run to.

There are many and varied eye conditions that result in visual impairments. If you need to know more about any specific eye conditions in more detail please visit the RNIB website www.rnib.org.uk/eyehealth/eyeconditions

#### Remember:

- Depending on the person's eye condition, their level of vision may change from one day to the next depending on lighting, tiredness, general health etc.
- Some eye conditions are degenerative so a person's level of vision may also change over time.