



# VISION LOSS CAUSED BY A STROKE OR OTHER BRAIN INJURY



## WHAT ARE THE TYPES OF VISION LOSS?

Typically, the loss of vision following a stroke or other brain injury is due to damage that has been done to that part of the brain that processes visual information which is transmitted to it using one's eyes as the conduits.



### HEMIANOPIA

Loss of vision in half the visual field.



### QUADRANTANOPIA

Loss of vision in a quarter section of the visual field.



### SCOTOMA

An island-like area of blindness.

## NEUROPLASTICITY + VISION RESTORATION

Your brain's natural ability to compensate for injuries and adjust to deal with these changes by creating new neural pathways and adapting as needed.

NEURO (Brain) + PLASTICITY (Changeable)



## HOW CAN VISION LOSS BE TREATED?

### RESTORATION

Vision Restoration Therapy (VRT) provides actual improvement in the range or sensitivity of the patient's field of vision through repetitive light stimulation to activate impaired visual functions in areas of partial injury.

- "Notable improvements were seen in 70.9% of the patients. Efficacy was independent of lesion age." A 302 patient study was reported by I. Mueller et al.; Restorative Neurology and Neuroscience 25 (2007) 563-572 IOS Pres
- Underpinned by 15 years of research and supported by more than 20 clinical studies.
- Therapy is Internet-delivered, can be done at home and fits around the patient's schedule.
- Therapy is personalized for the vision deficit and updated monthly.
- VRT does not require surgery or medication of any kind.

For more information on VRT please visit [www.NovaVision.com](http://www.NovaVision.com)

### COMPENSATION

NeuroEyeCoach is a computer-based eye movement training program designed to improve a patient's ability to scan the environment quickly and efficiently to compensate for the visual field deficit.

- Systematic training program with 12 levels of increasing difficulty, adapts to responses of patient.
- Therapy is Internet-delivered, can be done at home and fits around the patient's schedule.
- Designed to be relatively quick, it can be completed in 2-4 weeks.
- Professional Models enable patients to perform program in-clinic under supervision, or at home monitored by therapist.

For more information on NeuroEyeCoach please visit [www.NovaVision.com](http://www.NovaVision.com)

### SUBSTITUTION

The use of optical aids whereby the sighted field can be extended towards the blind field.

- This is a coping strategy that does not increase sensitivity in the blind field but rather uses prisms to optically shift part of the visual space thereby alerting people to objects and obstacles not otherwise visible to them.
- Peripheral prism glasses use high power prism segments embedded in a regular spectacle lens to expand the upper and lower visual fields of patients with hemianopia.

Find out more on prism glasses and the most recent clinical research published at: <http://bit.ly/240eSwo>

### NEXT STEPS:



Learn more about Neuroplasticity and post-stroke vision loss.



Take the Vision Field Test to identify a possible deficit and facilitate an informed discussion about your vision concerns with your physician.



Talk to your doctor about therapy options. If your doctor is not receptive or you have trouble finding a prescribing physician, use the NovaVision physician's directory.