

Head Injury (TBI)

What is TBI?

According to the Center for Disease and Prevention, "traumatic brain injury (TBI) is a serious public health concern that results in death and disability for thousands of people each year" (CDC, 2019). Major car accidents, sports injuries, and even small bumps on the head can impact normal brain functioning and cause lasting damage if not addressed. Mild to severe TBI can result in decreased brain functioning and sometimes, depending on the severity, a major disruption in motor and other skills greatly affecting an individual's quality of life.

What is the LENS?

The LENS, or *Low Energy Neurofeedback System*, is a unique and effective form of neurotechnology that targets the central nervous system and utilizes real-time brain waves to help alleviate symptoms, optimize functioning, and reclaim neurological and physiological potential. Results can be seen quickly, often beginning within the first session, and are lasting. It may be utilized as the primary treatment approach, or as an adjunct to other modalities. Clients across the lifespan, from young children (3 months old) to the elderly, and animals have benefited significantly from the LENS technology.

What makes the LENS different from other forms of neurofeedback?

Each person's brain waves (EEG signals) are unique to them and are constantly changing from moment to moment. Utilizing these EEG *fingerprints*, the patented LENS technology matches the feedback to each person's own physiological (neurological) profile in real time. Other forms of neurofeedback may require 40-80 sessions to elicit change and require much more time per session to obtain results.

- Average number of sessions for mild to moderate TBI is 4-8 sessions.
- Average duration of treatment is from a few seconds to several minutes.

What Are the Benefits of the LENS?

- Symptoms decrease or resolve quickly, with clients reporting noticeable differences after 1-4 sessions.
- Over 85% of clients have benefitted significantly from the LENS.
- Changes are enduring, meaning there is no need to receive LENS on an ongoing basis.

What Does Treatment Look Like?

The client completes 3 questionnaires that the LENS Provider then uses to develop a customized treatment plan unique to you and your physiology. During a session, sensors are placed on the head and used to monitor the real-time brainwave activity being emitted at the scalp. Your brain waves are unique to you and change from one moment to the next. The LENS identifies your unique EEG signature, and uses this information to customize your feedback. The entire session might run from a few seconds to several minutes, depending upon the physiology.

With a typical mild to moderate TBI symptom presentation, the client begins to experience relief from their symptoms (foggy brain, poor word recall, confusion, memory loss, insomnia, etc.) generally within the first 1-3 sessions. Symptoms have been shown to decrease significantly or resolve within 4-15 sessions with the LENS, making it a fast-acting modality. And the results are enduring. Severe traumatic brain injury often requires extended numbers of sessions to regain available functioning.

LENS PROVIDER TESTIMONIES

"In the past 17 years I have used 10 different neurofeedback systems. The LENS is the most user-friendly of the systems and produces the fastest results, to the delight of my patients and myself."

- D. Corydon Hammond, Ph.D., BCIA-EEG, ECNS, International Society for Neurofeedback & Research, Psychologist & Professor, University of Utah School of Medicine

"I have been providing neurofeedback services for 14 years. Several years ago I acquired a LENS to use along with my other units. To my surprise, I now use the LENS, and only the LENS, for about 70% of my clients because it is more effective and efficient."

- Douglass L. Starr, Ph.D., Clinical Psychologist

"I was astounded by the power and effectiveness of the LENS. I use it both alone and in conjunction with psychotherapy with uniformly positive results. I love the increased therapeutic effectiveness that the LENS offers."

- Jeffrey S. Rutstein, Psy. D.

"Although I have been using Neurofeedback with patients for well over twenty years and have four other systems active in my office, I now always start patients with LENS neurofeedback because it most consistently brings patients relatively quick relief of their distresses and disturbances and sets them on a course of a more fulfilling and spiritually balanced life. I've never before had so much fun helping so many tough cases."

- Thomas M. Broad, MD

RELEVANT LITERATURE

Hammond, D.C., Editor (2007). LENS: The Low Energy Neurofeedback System. Binghampton, NY, The Hawthorne Medical Press.

Larsen, S., Harrington, K., & Hicks, S. (2006). "The LENS (Low Energy Neurofeedback System): A Clinical Outcomes Study of One Hundred Patients at Stone Mountain Center, New York." *Journal of Neurotherapy*, 10(2-3), 69-78.

White, Christine (2008). "Restoring Optimal Brain Function Helps Many Health Problems: ADD, Autism, Depression, Fibromyalgia, Anxiety, PTSD, Learning Disorders, Strokes, Parkinson's Disease, Multiple Sclerosis." *Townsend Letter, The Examiner of Alternative Medicine*.



7300 Healdsburg Avenue, Suite C
Sebastopol, CA 95472
707.823.6225
hello@ochslabs.com
www.OchsLabs.com