

NESS L300™
Foot Drop System



NESS L300™ Foot Drop System

*Walk faster, farther,
with more freedom**

Take the stairs. Stroll through the park. Dance.

You may be able to do all this – and more – once again. Thanks to the NESS L300 Foot Drop System.

The NESS L300 is an advanced functional electrical stimulation (FES) system that sends low-level electrical impulses to the nerve in your leg, stimulating muscles to lift your foot.

The result: The NESS L300 helps people with foot drop walk more naturally, and enjoy greater independence and a better quality of life.

“I had a sense of purpose as I walked. I felt a lot more secure, a lot more stable in my steps.”

Maureen G.
Individual with multiple sclerosis

* Individual results vary. Consult with a qualified physician to determine if this product is right for you.



NESS L300™ Foot Drop System

People across the country and around the world experience foot drop as a result of a central nervous system injury or disease. Now, with the NESS L300™, these people may experience more natural movement, more function, more freedom.

Facts about Foot Drop

Foot drop results from an injury or illness that makes the foot and ankle muscles weak or paralyzed.

The following diagnoses that affect the central nervous system may cause foot drop:

- Stroke
- Multiple sclerosis
- Traumatic brain injury
- Incomplete spinal cord injury
- Cerebral palsy

When a person who has foot drop walks, the foot may drop and catch on the ground as the foot moves forward. The foot also may slap the ground as the person lowers it after stepping. To compensate for foot drop, some people hike their hip or swing their leg out to the side to keep their toes from catching on the ground.

The benefits of Functional Electrical Stimulation (FES) begin with improved walking

The NESS L300 offers a variety of advantages for people with foot drop, and may:

- Provide close to natural movement while walking¹
- Increase speed and improve steadiness while walking¹
- Increase social participation¹
- Reeducate muscles to function without the system (often called neuroplasticity)
- Prevent muscle loss (often called atrophy)
- Maintain or increase range of motion in the ankle and foot
- Increase local blood flow

FES creates body movement

The brain sends electrical signals to your body through the nervous system. These signals tell your body how to move. When injury or disease interrupts normal communication between the brain and leg(s), muscle weakness or paralysis may result.

If a muscle and its nerve supply remain healthy, FES may be used to replace the natural electrical signals from the brain, helping the weak or paralyzed limbs move again. With continued stimulation over time, the brain may be able to recapture and relearn this movement without stimulation.

Treatment usually begins immediately after an injury

A number of factors impact the overall benefit a person will receive from using FES, including the severity and nature of the paralysis, the length of time since the paralysis occurred, and how frequently the NESS L300™ is used.

Clinical studies show that early use of FES may provide optimal benefits.^{2,3} Studies also suggest significant improvement among people whose injury occurred years ago. Before beginning any rehabilitation therapy, it is essential to speak with your physician.

“It gives you such hope to see that maybe some normalcy would return to your life.”

Deborah A.
Stroke survivor since 2004



NESS L300™ Foot Drop System

Three small, wireless components

The system consists of three small components that all communicate with each other wirelessly. When you lift your heel, the NESS L300 sends wireless signals that stimulate specific nerves. These nerves contract the muscles that lift your foot while walking.

1. Comfortable, lightweight Functional Stimulation Cuff

Easy to put on and take off with one hand, the Functional Stimulation Cuff – also known as the Leg Cuff – is compact, allowing you to wear it under most clothing. Its breathable, soft fabric is extremely comfortable. And it has adjustable straps for a snug fit.

The Leg Cuff sits just below your knee and holds the stimulation unit as well as electrodes that are custom positioned for your leg. The Leg Cuff also features a special “patella (or knee) locator” that assures the right fit every time.

2. Innovative Intelli-Sense Gait Sensor™

Here’s where the NESS L300 stands apart from any other device available. As you walk, the Gait Sensor automatically detects different surfaces and speeds. It then immediately sends a signal to the Leg Cuff to adjust the stimulation to help you walk more naturally.

Forwards, backwards. Upstairs, downstairs. On grass, on sand. Imagine that.



3. Wireless, portable Control Unit

This handheld unit lets you turn the NESS L300 on and off and make minor stimulation adjustments at your fingertips. Carry it in your pocket, on your belt, or on your wrist.

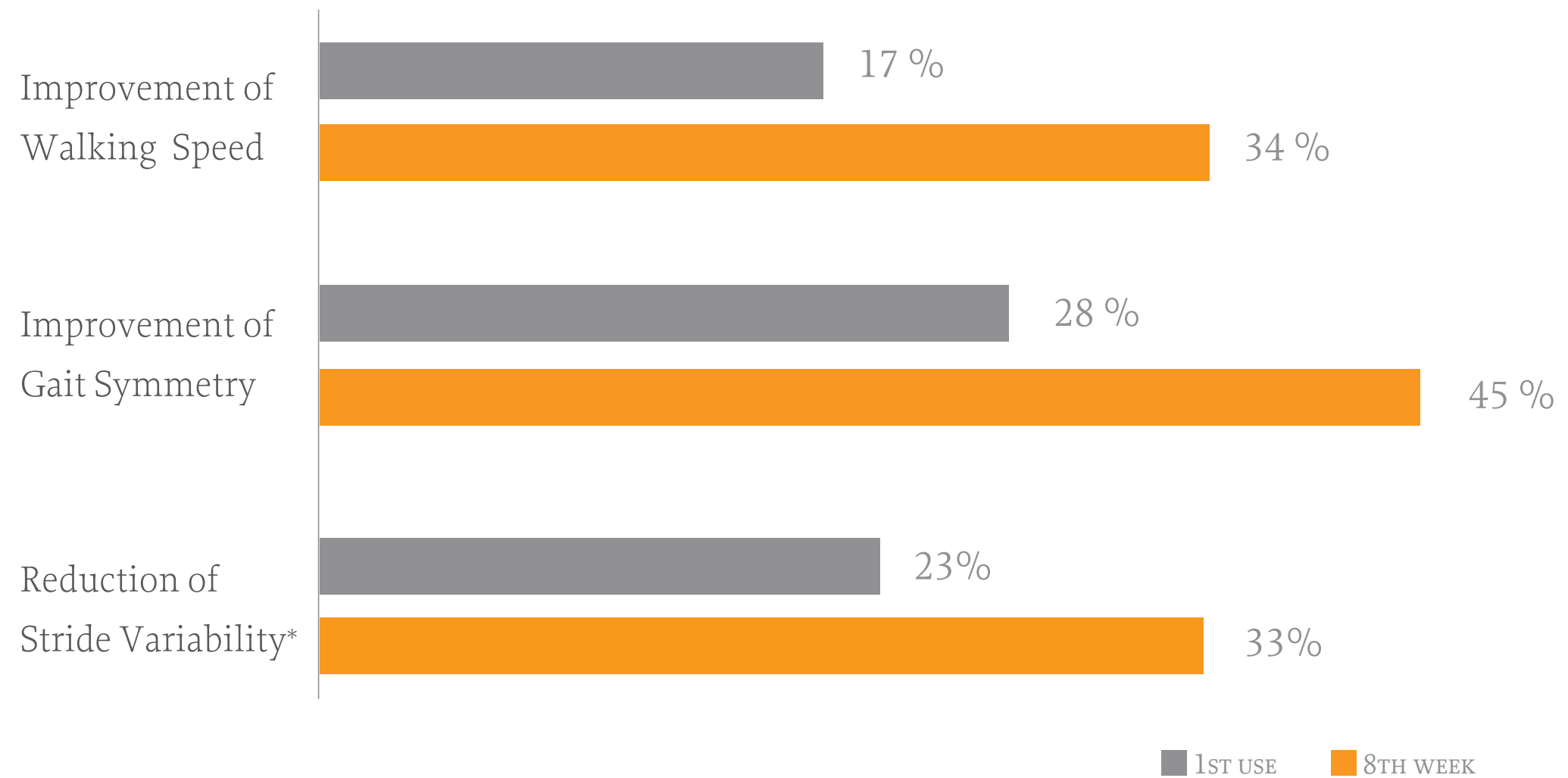


Backed by research

A recent clinical study suggested that the NESS L300™ offers significant improvements when compared to walking without it.⁴

Another study examining patients who used an ankle-foot orthosis (AFO) showed that the NESS L300 significantly improves stride time compared to an AFO. And 100% of the patients in this study preferred the NESS L300 to their AFO.⁵

Analysis of Gait Improvements for NESS L300™ Users



* The distance your foot travels when you take a step.



At Bioness®, we help people with impaired upper and lower extremities regain function and freedom for life

Bioness is committed to helping people become more independent through clinically proven products. We offer advanced technology devices designed to provide functional and therapeutic benefits for individuals afflicted with neurological diseases and disorders such as stroke, multiple sclerosis, traumatic brain injuries, or spinal cord injuries.

Healthcare providers from leading rehabilitation facilities and hospitals across the country are documenting success in patient rehabilitation with the NESS L300™ Foot Drop System and the NESS H200® Hand Rehabilitation System.

As of 2008, seven of the top 10 rehabilitation hospitals, as determined by *U.S. News and World Report*, have implemented Bioness programs as a part of their continuum of care.

“I would say the L300 is the best device in my rehabilitation so far. And I recommend it to anyone who needs anything like this to try it.”

Barry D.
Stroke survivor since 2005



Make your move

Call us at 800.211.9136, option 2.

We will help you find a healthcare professional who can determine if the NESS L300™ can help you walk faster, farther, and with more freedom.

“My goals were to throw away my AFO, throw away my cane, and start walking again. And that’s what I’ve accomplished.”

Simon L.
Stroke and traumatic brain injury survivor since 1994

