

Vagus Nerve Stimulation (VNS) Therapy

A paired approach to stroke recovery



About VNS for Stroke

*Surgically placed.
Paired with therapy.
Evidence-based.*

Vagus nerve stimulation (VNS) is a form of neuromodulation that uses a small device to deliver gentle, controlled electrical pulses to the vagus nerve — the body's main brain-to-body communication pathway.

For stroke recovery, VNS is used alongside rehabilitation. During therapy exercises and approved at-home activities, the device is activated to stimulate the brain in a way that supports neuroplasticity — the brain's ability to build new neural pathways around areas affected by stroke.

VNS is an add-on to rehabilitation, not a replacement for it, and your care team programs and adjusts it over time. Progress is often gradual, and results vary from person to person.

The Device

Outpatient surgical placement

Placed beneath the skin, connected to the vagus nerve.

Insurance

Most major plans accepted

Medicare and self-pay also available.

Safety

Established safety record

*More than 30 years of experience.
Can be reviewed with your care team.*

When rehabilitation alone has plateaued, there may be another option!

See reverse for more treatment information and contact info.

Who VNS is For

- » Chronic ischemic stroke survivors
- » Six months or more post-stroke
- » Moderate to severe upper-extremity (arm/hand) impairment
- » Plateaued with previous ongoing rehabilitation
- » Some active arm and hand motor function remaining

Your Care Team

- » Neurosurgery for device placement
- » Physical & Occupational Therapy for paired rehabilitation sessions
- » Physical Medicine & Rehabilitation (PM&R) for ongoing care coordination

What to Expect

A Small, Implanted Device

Placed during an outpatient surgical procedure, connected to the vagus nerve in the neck.

Paired With Rehab

Activated during therapy sessions and approved at-home exercises to reinforce movement.

Gradual Progress

Benefits build over time as new neural connections form; your care team will track and adjust your therapy.

Ongoing Care & Follow-Up

Your team programs and monitors the device. Temporary effects like hoarseness, throat discomfort, or coughing can occur during stimulation.

Ready to learn more?

Call 855-WVU-CARE

Ask your care team whether VNS may be a fit for your recovery.