

## FAQ

### **Will DBS cure my disease?**

No, but DBS may give you a better quality of life and reduce your medication usage. For Parkinson's patients, it may even extend your life. For essential tremor, it will likely reduce your tremors for life.

### **How safe is DBS?**

Dr. VanSickle has performed over 600 DBS lead placements, with an infection rate significantly below published national rates. Serious neurologic complications are very rare.

### **What makes Denver DBS Center unique?**

Our experience, low complication rate, superior electrode placement, and high patient satisfaction set us apart. Once you are our patient, you are always our patient and you should feel free to come back for any needs arising with your DBS system. In partnership with your neurologist, we provide customized, personal care.

### **Is DBS covered by insurance and/or Medicare?**

Yes, DBS is typically covered. We will contact your insurance provider and handle the prequalification details.

### **How do I know if DBS is right for me?**

Call us toll-free at **1.855.202.9303**. We will explain the procedure and the qualification criteria and answer all your questions.

To learn more or schedule an appointment, go to **DenverDBSCenter.org** or call us toll-free at **1.855.202.9303**.



**DENVER  
DBS CENTER**

An affiliation of South Denver Neurosurgery

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**DENVER  
DBS CENTER**

A world leader in the use of robotic-assisted Asleep DBS



**Livebetternow**

Deep brain stimulation (DBS) surgery can make life with Parkinson's or essential tremor more livable. You don't have to wait to have it. You can even sleep through it.

## The benefits of DBS

Deep brain stimulation (DBS) has benefited more than 100,000 patients over a quarter of a century. DBS helps control symptoms by delivering tiny electrical signals into one of three areas of the brain that control movement.

### **FOR PARKINSON'S DISEASE**

#### **DBS helps in important ways:**

- Nearly doubles the "on" time per day without dyskinesia
- Reduces medication use by roughly 50%
- Improves motor symptoms — rigidity, tremor, lost facial expression, and freezing — for better quality of life
- May reduce the risk of death\*

(Source: Journal of Neurology, Neurosurgery, and Psychiatry, 2013\*)

#### **You are a candidate if you have:**

- A clear diagnosis of idiopathic (arising spontaneously) Parkinson's disease
- No dementia
- Fluctuations in symptoms with levodopa therapy (Parcopa, Sinemet, Stalevo)
- Some improvement with levodopa therapy
- No condition that would prevent surgery

*The Denver DBS Center can use Asleep DBS with robotic guidance to accurately target the smaller and technically more demanding STN region used to treat early-onset Parkinson's patients.*

### **FOR ESSENTIAL TREMOR**

DBS surgery has helped many patients with essential tremor and can be performed on one or both sides of the brain. You are a candidate if:

- You consider your symptoms severe or disabling
- You are healthy enough to have surgery
- You were not helped sufficiently by medications, including propranolol (Inderal, InnoPran)

## DBS for OCD and dystonia



*Denver DBS Center, in partnership with Littleton Adventist Hospital, was the first in Colorado to perform DBS to treat obsessive-compulsive disorder (OCD). We are currently the only center offering DBS for OCD and for primary and secondary dystonia. Visit **DenverDBSCenter.org** for more information.*

## How and when?

### **DBS surgery consists of:**

- Placing an extremely thin, insulated wire called a lead (electrode) into the brain
- Implanting a device called a generator (neurostimulator) below the collarbone
- Attaching a thin, insulated wire under the skin, connecting the generator and electrode

Patients can now remain asleep during surgery, thanks to recent advancements (find out more inside). Research shows that DBS in the earlier stages of Parkinson's disease is effective — more so than medications.

(Source: New England Journal of Medicine, 2013\*)

*The Denver DBS Center is one of the top 5 largest DBS centers in the nation. To learn more or schedule an appointment, go to **DenverDBSCenter.org** or call us toll-free at **1.855.202.9303**.*

\* All studies cited in this brochure can be found at **Research.DenverDBS.org**.

## Leader in Asleep DBS

Denver DBS Center was the first in the country to perform robotic-guided Asleep DBS, which allows greater precision and a shorter procedure while allowing patients to be asleep. As a world leader in this technique, we have used it more times than any other center, and most of our patients now choose it over traditional Awake DBS.

*Because robotic-guided Asleep DBS requires fewer brain penetrations and a much shorter surgery, it potentially reduces the risk of stroke, neurological injuries, and infection.*

For patients who cannot have robotic-guided Asleep DBS (a very small percentage), we still offer Awake DBS.

Patients who have received DBS surgery can now receive full-body MRI scans, according to a new FDA ruling in early 2016. The Denver DBS Center is equipped to offer full-body MRI scans no matter where you had your DBS system placed.

|   | Robotic-Guided Asleep DBS   | Awake DBS   |
|---|---|---|
| <b>Safety</b>   | 85% of leads are placed with a single brain penetration                                       | Requires multiple brain penetrations, increasing risk of stroke and neurological injury |
| <b>Accuracy of lead placement (the closer the lead to the brain target, the more effective it is at stopping tremors)</b> | Within 1 mm (Denver DBS Center averages .78-mm final accuracy)                                | Within 2 mm   |
| <b>Length of surgery (shorter surgery reduces the risk of infection)</b>  | 2 hours for bilateral surgery   | 4 hours for bilateral surgery at Denver DBS Center (up to 16 hours at other centers)    |
| <b>Outcomes</b>   | Outcomes for Asleep DBS have been shown in multiple research studies to be equal to Awake DBS |   |



## About Dr. VanSickle

David VanSickle, MD, PhD, specializes in Asleep DBS using robotic guidance, functional neurosurgery, neuro-oncology,

and surgery for epilepsy. He has a doctorate in bioengineering and a medical degree from University of Pittsburgh, and he completed a neurosurgery residency at the University of Colorado Health Sciences Center. Dr. VanSickle serves on the board of directors of the Parkinson Association of the Rockies.

*Dr. David VanSickle is a leading expert in robotic-guided Asleep DBS. He has performed more of these surgeries than any physician in the world, and he publishes research on the technique and trains surgeons worldwide in the technique.*

*Dr. VanSickle has helped pioneer the use of robotic-guided Asleep DBS using Mazor Robotics technology, leading to greatly improved accuracy of lead placement.*



## Rapidly progressing evidence for DBS in Parkinson's disease

