

# Lower infection risk for coiled versus noncoiled leads

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(HealthDay)—Percutaneous leads used for neurostimulation of the

peripheral nervous system have a much lower risk of infection with a coiled design compared to noncoiled leads, according to a review published online Sept. 27 in *Pain Practice*.

Brian M. Ilfeld, M.D., from University of California, San Diego, and colleagues conducted a literature review to identify clinical studies of percutaneous neurostimulation of the peripheral nervous system. Eligible studies had neurostimulation of more than two days, included explicit information on [adverse events](#), and had a primary end point of the number of infections per 1,000 indwelling days.

The researchers identified 43 studies that included both coiled (21 studies) and noncoiled (25 studies) leads. Three studies evaluated both. The risk of infection with noncoiled leads was 25 times greater than with coiled leads ( $P = 0.006$ ). For coiled leads the infection rate was 0.03 infections per 1,000 indwelling days, and for noncoiled leads the infection rate was 0.83 infections per 1,000 indwelling days ( $P = 0.006$ ).

"With many therapeutic goals such as functional improvements and the relief of pain requiring multiple weeks of stimulation, these findings could have significant implications in the choice of a lead design and the potential for extending the use of percutaneous peripheral neurostimulation," the authors write.

Several authors disclosed financial ties to pharmaceutical and medical device companies, including SPR Therapeutics, which partially funded the study.

**More information:** [Abstract](#)  
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