

# Are Wind Turbines Hazardous to Your Health? Docs Disagree

By [Andy Bromage](#) [05.12.10]

Is “wind turbine syndrome” a bona fide medical condition? Reports of people suffering because of their proximity to wind turbines — from sleep deprivation, migraine headaches and uncontrollable rage — are making their way into the mainstream debate over Vermont’s energy future.

State Rep. David Potter (D-Rutland) told Statehouse reporters at a January press conference: “It’s pretty well established that industrial wind turbines can cause significant health and safety issues for some folks living near them.” The occasion was the official launch of an antiwind citizen group called [Energize Vermont](#), which compares turbines to tobacco and asbestos, cancer-causing products that industry-paid scientists falsely told the public were safe.

Last week, Vermonters got an earful about wind turbine syndrome from one of the theory’s leading purveyors, Dr. [Michael Nissenbaum](#), a Northern Maine Medical Center physician who found mysterious health problems among homeowners living near a wind farm in Mars Hill, Maine. Nissenbaum told a packed crowd at a [Rutland Regional Medical Center](#) forum that the swishing sound made by wind turbine blades can cause sleep deprivation, leading to a host of medical problems. Audience members, many of whom live near a proposed wind farm, listened raptly.

Taking the opposite view was Dr. Robert McCunney, a staff physician at Massachusetts General Hospital’s pulmonary division who coauthored a study for the [American Wind Energy Association](#) (AWEA) that found turbine noise can be “annoying,” but is not causally linked to health problems.

For 90 minutes in a packed basement room, the two doctors whipped through slide shows, offered a crash course on acoustics and sparred politely about what the science really says.

With numerous industrial wind farms in the pipeline in Vermont — including ones in Lowell, Sheffield and Georgia — debate is officially underway about the supposed health effects of big wind turbines.

Nissenbaum, a board-certified diagnostic imaging specialist, offered his findings from surveys and interviews he conducted of homeowners around the Mars Hill wind farm, plus a “control” group of families living three miles away. At first glance, his data would make anyone a little wind wary: Ninety-three percent of respondents reported new sleep disturbance, and a third of them were taking new prescription medication for it; 53 percent complained of increased headaches; 20 percent reported dizziness; a third

reported weight gain since the turbines went up; many broke down in tears during the interviews.

Some residents living near the turbines reported they were so irritated by the noise, they felt homicidal. “Absolute rage — you feel you want to kill someone, and don’t know who to kill,” a 67-year-old woman told Nissenbaum. Homeowners from the control group reported no such problems.

Nissenbaum’s explanation is that the pulsating noise from turbines causes fear and distress that activate the brain’s limbic system, triggering the release of stress hormones.

Another look at the Mars Hill findings, however, reveals its limitations: Only 15 people, living in nine households, were interviewed for the research.

“This is not scientific data,” Nissenbaum admits, making quotation marks with his fingers when he says the word “scientific.” “But it’s qualitative data and it’s real. When you see a Teamster with a tractor cap start crying, that’s not normal.”

McCunney has reached a drastically different conclusion — one that, unlike Nissenbaum’s work, was gleaned from numerous peer-reviewed studies on the health impacts of wind turbines and of noise generally.

McCunney says he typed “wind turbine syndrome” into [PubMed](#), an online database of 19 million citations for peer-reviewed biomedical research, and the search turned up nothing. Likewise, a search for “vibroacoustic disease,” another syndrome supposedly linked to wind turbines, revealed no case — control studies or longitudinal studies — the ones scientists consider valid, McCunney says.

McCunney’s group did no original research, but rather reviewed and compiled findings from a dozen other studies. No U.S. wind farm has been subject to a peer-reviewed epidemiological study, McCunney says, but investigations by scientists in Sweden, the Netherlands, Denmark and the UK found no evidence that wind turbines, on their own, cause physiological or psychological health problems. Sample sizes ranged from 750 to 2000 respondents.

McCunney doesn’t doubt that wind turbine noise is “annoying” for many living near them, or that the symptoms reported in Mars Hill are real. In fact, the studies from Europe showed that the louder the wind turbines, the more they bothered those living nearby. He only notes that wind turbine syndrome is not an accepted medical diagnosis and that there’s been no peer-reviewed research on it.

What’s more, the studies McCunney reviewed revealed a stunning correlation: People with negative attitudes toward wind turbines were 13 times more likely to report annoyance from them. McCunney says that hit researchers “over the head like a frying pan.”

“The symptoms do seem to be real; there’s no question about it,” McCunney says. “There’s no question that sleep disturbance, when it persists, can cause adverse health effects. However, I am struggling to try to understand how the noise from wind turbines is substantially different than noise from other aspects of human life, whether it’s trucking, transportation, railroading, aviation and so forth.”

Nissenbaum argues that turbines in Europe are generally smaller, and less noisy, than those going up in the U.S. He also claims McCunney’s industry-backed review was “selective” and incomplete.

McCunney seemed to sense skepticism from the Rutland crowd and insisted he has “no ax to grind” in the wind power debate.

He says AWEA contacted him “out of the blue” about taking part in the review. At the time, a wind turbine had been proposed in McCunney’s home town, south of Boston, and he wondered about the technology’s health and safety record.

By many accounts, the Mars Hill wind farm was poorly executed, pushed through with minimal citizen input and built far too close to homes — as near as 1200 feet in one instance. Preconstruction sound modeling was also flawed, according to Nissenbaum. The swish of the blades was louder than residents were led to believe it would be.

Toward the end of the evening, one audience member asked the big-picture question: “Can you contrast the health and environmental impacts from wind power to those of coal, oil and nuclear?”

McCunney had a good response: “None of us needs to be reminded of the health implications and environmental consequences of oil in light of the tragedy in the Gulf of Mexico right now.”