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Wind Turbines and Health Hazards

By LESLIE KAUFMAN

There is no conclusive evidence so far that wind turbines are responsible for health problems ranging from balance problems to diabetes, an independent panel of health experts reports.

With turbine farms on the rise, complaints and lawsuits brought by communities where they have been placed have mushroomed. Apart from more serious ailments, residents have cited the swooshing of the blades as a factor in problems like disturbances in the vestibular system that affect the inner ear and balance.

So in Massachusetts, a state with its own share of wind farms, the state Department of Environmental Protection convened a panel of independent health experts to review the existing medical literature -- still limited -- on health effects related to wind turbines. The panel did not do its own research or focus on repercussions at a particular site. But a comprehensive review of epidemiological studies conducted near turbines in the United States and Europe, released on Tuesday, yielded these insights:

- There is no evidence for a set of health effects characterized as "wind turbine syndrome." The evidence collected so far indicates that the sounds beyond the range of human hearing range cannot affect the human balance system.
- The weight of the evidence suggests no association between noise from wind turbines and psychological distress or other mental health problems.
- None of the epidemiological evidence reviewed points directly to an association between noise from wind turbines and pain and stiffness, diabetes, high blood pressure, tinnitus, other hearing impairments, cardiovascular disease or headache/migraine.
- Scientific evidence suggests that the flickering shadows of the turbines do not pose a risk of causing seizures.

Kenneth L. Kimmell, the commissioner of the Massachusetts Department of Environmental Protection, said the study seemed to present a clean bill of health for wind turbines -- except on the issue of whether the noise causes "annoyance or sleep disruption." The report suggested that the evidence for either was limited but that more study is needed, he said.

That finding is similar to one from the Oregon Public Health Authority, which released its

own assessment of the health impact of wind turbines this month. That report indicated that the perception of the turbines' noise was subjective yet could have an impact.

"There is some evidence that wind turbine sound is more noticeable, annoying and disturbing than other community or industrial sounds at the same level of loudness," that study said. Wind turbines produce sounds that fluctuate in loudness and in type, which is generally considered more annoying than steady or constant sounds, the report said.

"Wind turbine sound levels may not decrease predictably at night, and could be perceived as louder and more noticeable at night than during the day," the report said.

Mr. Kimmell said that the Massachusetts state government would await the results of a 60-day public comment period before proposing recommendations for regulating wind farms in the future.

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