

As Use of Wind Power Grows, So Do Fears that Turbines May Be Hazardous to Your Ears

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There is no more fiercely disputed topic these days than what source of energy we should draw on to power our ever-more power-consuming world. Words and phrases like greenhouse gases, war on coal, Solyndra, Keystone pipeline, fracking, Fukushima Daiichi and Chernobyl, energy independence, rising sea level, global warming and scientific conspiracy are invoked to defend or attack pretty much every energy source known to man.

So, is it any wonder that wind power, one of the fastest-growing alternatives to fossil fuels, is also stirring controversy?

True, it doesn't pollute the air or water or add heat to the atmosphere. And, unlike burning coal, gas, and oil, using wind power cannot deplete earth's supply of wind.

As major wind farms are being erected on land and off-shore, wind power is becoming more economically viable in many countries, including the U.S., Canada, Germany, and, above all, Denmark. There, over 40% of the nation's electrical power is being generated from renewable sources—primarily wind.

HEALTH PROBLEMS REPORTED

Nevertheless, wind power is not without its problems and critics. One issue is the damage that, some scientists believe, giant wind turbines, up to 500 feet in height, can cause to the auditory systems of people who live too close.

Last month on the blog Hearing Views, Jerry Punch, PhD, an audiologist, and Richard James, an acoustical consultant, published a compelling [three-part series](#) discussing how the sound generated by wind turbines—even sound that is too low in frequency for human beings to hear—may be causing the negative reactions reported by people residing close to wind turbines. These include sleep disturbance, headache, dizziness, tinnitus, ear pressure or pain, irritability, and fatigue.

HEALTH CANADA WEIGHS IN

The latest word in the wind power debate comes from Health Canada, which, according to its web site, is “the Federal department responsible for helping Canadians maintain and improve their health, while respecting individual choices and circumstance.”

It published a [report](#), “Wind Turbine Noise and Health Study: Summary of Results,” on October 30 presenting the findings from a large-scale epidemiology study on some 1200 families in the provinces of Ontario and Prince Edward Island. Most of the people who participated lived within 600 meters of a wind turbine.

The purpose of the study, launched in July 2012, was “to support a broader evidence base on which

to provide federal advice and in acknowledgement of the community health concerns expressed in relation to wind turbines.”

And, what did the study find about the effects of wind turbines? It’s not entirely clear.

Interestingly, when the Canadian Broadcasting System (CBC), reported on the study, it headlined its [story](#) “Wind turbine noise not linked to health problems, Health Canada finds.”

Indeed, in its report’s Preliminary Research Findings,” Health Canada stated:

“Exposure to WTN was not found to be associated with any significant changes in reported quality of life for any of the four domains [Self-reported Sleep, Self-reported Illnesses and Chronic Diseases, Self-reported Stress, and Quality of Life], nor with overall quality of life and satisfaction with health.”

However, the Health Canada report also noted that a number of effects are statistically associated with exposure to increasing levels of WTN. These effects included “annoyance towards several wind turbine features (i.e., noise, shadow flicker, blinking lights, vibrations, and visual impacts).”

Health Canada pointed out that annoyance with noise from wind turbines was “statistically related to several self-reported health effects including, blood pressure, migraines, tinnitus, dizziness, scores on the PSQI [Pittsburgh Sleep Quality Index], and perceived stress.”

MORE TO COME

There is no consensus yet on the damaging effects that wind turbines may have on the ears and other organs of people living nearby. What is clear is that the topic will continue to be studied and debated. On December 10, Hearing Views published a [rejoinder](#) by Gabe Elsner from the Energy & Policy Institute to the series by Punch and James discussing the dangers of wind power.

Ideally, the outcome of all the research and debate will be to find a safe, non-annoying, and economically viable way to reap the benefits of wind power.