

# Wind Turbines and Public Health

Answering questions about the health effects of wind turbines

## Research has not connected wind turbines and negative health effects

Wind turbines are increasingly common as a renewable energy source in Wisconsin, which has raised questions about a number of health and safety issues. While individuals have reported concerns about the noise and safety of wind turbines, studies do not support a relationship between wind turbine noise and health problems.<sup>1,2</sup>

Further studies may be needed to refine recommended minimum setback distances and identify where amending local policies might be warranted.<sup>3,4</sup>

### Quick Information

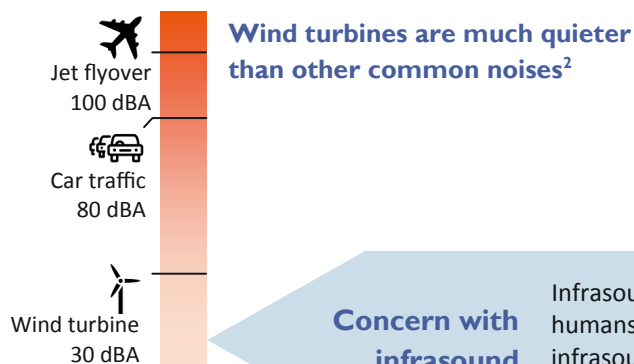
Shadow flicker and blinking lights occur too slowly to cause seizure-related health concerns.<sup>2</sup>

Noise levels from wind turbines have not been found to cause health effects.<sup>5</sup>

Minimum required distances should protect residents from ice that falls from turbine blades.<sup>6</sup>

## Noise levels from wind turbines are not significant enough to impact health

Environmental noise can be linked to headache, poor cognitive function, and reduced sleep quality. However, the levels of noise from wind turbines have not been found to be high enough to cause health effects.<sup>5</sup>



Infrasound is sound that is lower in pitch than the range that humans can detect. While wind turbines can generate infrasound, the sound levels they generate have not been shown to contribute to health effects.

## Wind turbines should be located a safe distance from roads and homes

In most cases, minimum required distances from residences effectively address ice that falls from the turbine blades.<sup>6</sup> In addition, further distances could decrease annoyance to individuals.

## Learn More

**Wind Turbines and Health webinar** | [livestream.com/DHSWebcast/events/6576632](https://livestream.com/DHSWebcast/events/6576632)

**Public Service Commission's Wind Siting Rules** | [psc.wi.gov/pages/renewables/windsitingrules.aspx](https://psc.wi.gov/pages/renewables/windsitingrules.aspx)

<sup>1</sup>Health Canada. Wind Turbine Noise and Health Study. 2013

<sup>2</sup>Oregon Public Health Division. Strategic Health Impact Assessment on Wind Energy Development in Oregon. 2013

<sup>3</sup>Jeffery RD, Krogh CM, Horner B. Industrial wind turbines and adverse health effects. *Can J Rural Med.* 2014;19 (1): 21-6.

<sup>4</sup>Knopper LD, Ollson CA. Health effects and wind turbines: A review of the literature. *Environ Health.* 2011;10 (78): 1-10

<sup>5</sup>Halperin D. Environmental noise and sleep disturbances: A threat to health? *Sleep Sci.* 2014;7 (4):209-212.

<sup>6</sup>Tammelin et al. 1998. Wind Energy Production in Cold Climate  
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