

Does living near wind turbines negatively impact human health?

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Wind turbines are a source of clean renewable energy, but some people who live nearby describe the shadow flicker, the audible sounds and the subaudible sound pressure levels as "annoying." They claim this nuisance

negatively impacts their quality of life.

A team of researchers from the University of Toronto and Ramboll, an engineering company funding the work, set out to investigate how residential distance from the [wind turbines](#)—within a range of 600 meters (1,968.5 feet) to 10 kilometers (6.2 miles)—affects people's health.

They reanalyzed data collected for the "Community Noise and Health Study" from May to September 2013 by Statistics Canada, the national statistical office. The team reports their new analysis in the *Journal of the Acoustical Society of America*.

"The Community Noise and Health Study generated data useful for studying the relationship between wind [turbine](#) exposures and human health—including annoyance and sleep disturbances," said Rebecca Barry, an author on the paper. "Their original results examined modeled wind turbine [noise](#) based on a variety of factors—source sound power, distance, topography and meteorology, among others."

The team's new assessment confirmed Statistics Canada's initial findings. "Respondents who live in areas with higher levels of modeled sound values (40 to 46 decibels) reported more annoyance than respondents in areas with lower levels of modeled [sound](#) values (

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