



Wind Energy and Your Health

Wind energy is one of the safest and most environmentally-friendly sources of electricity available today. It has also become one of the lowest-cost options for new electricity supply, while providing significant economic benefits to Canadian communities.

People have been living, working and enjoying productive lives near wind farms for decades. Wind energy is a growing source of electricity in more than 90 countries around the world. It is a safe and sustainable choice for the production of emissions-free electricity. Unlike many other sources of energy, wind energy does not produce toxic, hazardous or radioactive waste, requires significantly less water, creates no air pollution, and does not contribute to climate change.

It is important to have factual information when making decisions about Canada's energy future. One common concern is that sounds from wind turbines can cause health effects. This has been studied extensively and **the balance of scientific evidence and human experience to date clearly concludes that wind turbines are not harmful to human health.**

The global wind industry continues to engage with experts in science, medicine and occupational and environmental health to monitor ongoing, credible research in the area of wind turbines and human health.

What do the experts say?

Health Canada's 2014 *Wind Turbine Noise and Health Study* found that wind turbine noise exposure was not

associated with self-reported medical illnesses and health conditions. This study was undertaken in Ontario and Prince Edward Island, studying residents of homes in the vicinity of 18 wind farms (consisting of 399 wind turbines). The study found that the following disorders were **not** associated with wind turbine noise:

- Self-reported sleep problems (such as general disturbance, use of sleep medication, diagnosed sleep disorders);
- Self-reported illnesses (such as dizziness, tinnitus, prevalence of frequent migraines and headaches) and chronic health conditions (such as heart disease, high blood pressure and diabetes); and
- Self-reported perceived stress and quality of life.

The study did find that higher levels of wind turbine noise based on proximity were statistically associated with annoyance. It also found that annoyance was significantly lower among the 110 participants who received a personal benefit from the wind farm, which could include lease payments, employment, etc.

A review of 60 research studies conducted worldwide on wind turbines and human health was published in **Frontiers in Public Health** and the authors concluded that the weight of evidence suggests that when sited properly, wind turbines are not related to adverse health effects in humans though they may be a source of annoyance for some people.