



Adverse Health Effects From Industrial Wind Turbines

Industrial wind turbines affect physical and mental health.

- People living near wind turbines experience migraines, heart palpitations, sleep disturbance, and hearing problems.⁽¹⁾⁽²⁾⁽³⁾
- People living near wind turbines experience a decreased quality of life, constant stress, increased anxiety, depression, confusion, anger, and a sense of injustice.⁽⁴⁾ Stress increases the risk of cardiovascular disease and cancer.⁽⁵⁾

Industrial wind turbine noise causes sleep disturbance.

- Sleep disturbance is the most commonly reported adverse health effect from wind turbines.
- Christopher Hanning, MD, a specialist in sleep disorders in the UK, says, "In my expert opinion, from my knowledge of sleep physiology and a review of the available research, I have no doubt that wind turbine noise emissions have been clearly associated with sleep disturbances."⁽⁵⁾

Industrial wind turbines create a pulsing low frequency sound and infrasound, both linked to serious chronic health problems.

- Low frequency noise can cause ear and balance symptoms including tinnitus, earache, dizziness or vertigo, and nausea. Other health problems include sleep disturbance, headaches, difficulty concentrating, irritability, fatigue, stress, anxiety, and heart palpitations.⁽⁶⁾
- Long-term exposure to infrasound (inaudible sound) and low frequency noise can cause VAD (vibroacoustic disease). VAD evolves over a long period of exposure and can lead to severe medical conditions, such as heart attacks, stroke, cancer, epilepsy, rage reactions, and suicide.⁽⁷⁾

Industrial wind turbines pose a threat to human safety.

- Firefighters can't reach turbine fires, which release toxic smoke and fling burning debris from heights typically around 400 feet.⁽⁸⁾

- Turbines collapse and turbine blades shred. A recent turbine failure in Ohio sent broken blade pieces flying more than 1,300 feet.⁽⁹⁾ Turbines also ice up and the blades drop or throw ice onto roads and houses.
- Light through the blades causes sweeping, strobing light effects in nearby houses and on roads, where reflection off the blades is also a driving hazard.

References

- (1) **"Toward a case definition of adverse health effects in the environs of industrial wind turbines: Facilitating a clinical diagnosis," Robert McMurtry, MD, Bulletin of Science Technology & Society, 2011 31:316.** Dr. Robert McMurtry is the former Dean of Medicine for the University of Western Ontario. This paper was presented following The First International Symposium on Adverse Health Effects from Industrial Wind Turbines, held in October 2010 in Ontario, Canada.
- (2) "Wind turbine noise seems to affect health adversely and an independent review of evidence is needed," Christopher Hanning, MD, British Medical Journal, March 10, 2012.
- (3) **Wind Turbine Syndrome: A Report on a Natural Experiment, Nina Pierpont, MD, K-Selected Books, Santa Fe, NM, 2009.** Dr. Pierpont was the first to publish detailed information about the health effects that wind turbine neighbors suffer. As a consequence, Dr. Pierpont has been attacked by the wind industry. The book has two parts, one for clinicians and the other for lay people. The part for lay people is easy to read and gives a through introduction to health effects.
<http://www.windturbinesyndrome.com/wind-turbine-syndrome/what-is-wind-turbine-syndrome/>
- (4) **"Evaluating the impact of wind turbine noise on health-related quality of life," Daniel Shepherd, et al., Noise and Health, Vol. 12, Issue 54, September-October 2011.** This is a cross-sectional epidemiological study carried out by Daniel Shepherd, Ph.D., School of Public Health, Auckland University, New Zealand. The major finding was that wind turbine neighbors living within about 1.25 miles of industrial turbines reported lower overall quality of life, physical quality of life, and environmental quality of life. This study makes a case for a minimum industrial wind turbine setback of 2 kilometers (1.24 miles).
- (5) **"Wind Turbine Noise, Sleep and Health," Dr Christopher Hanning, MD, The Society for Wind Vigilance, April 2010.**
- (6) **"Infrasound from wind turbines could affect humans," Alec N. Salt and James A. Kaltenbach, Bulletin of Science Technology & Society 2011 31:296.** Alec Salt, Ph.D. is a well-known researcher at Washington University in Saint Louis MO. He has 35 years of experience studying the physiology of the ear. Dr. Salt suggests a possible physiological mechanism by which sound from wind turbines can make people sick.
- (7) **"Vibroacoustic disease: the need for a new attitude towards noise," Mariana Alves-Pereira and Castelo Branco, CITIDEP & DCEA-FCT-UNL (Centro de Investigação de Tecnologias de Informação para uma Democracia Participativa, Universidade Nova de Lisboa, Portugal), 2000.** Ground-breaking research on the physiological effects of low frequency sound and infrasound on humans is currently being carried out by Mariana Alves-Pereira, Ph.D. She, along with Castelo Branco, have published peer-reviewed papers on vibroacoustic disease (VAD).
- (8) **"Wind turbine fire," Natalie Tendall, KIMT 3 TV, May 22, 2012,**
<http://www.kimt.com/content/localnews/iowanews/story/Wind-Turbine-Fire/0WxPEoYavUK6JddbmQl-3w.csp>
- (9) **"Damaged turbine suspends wind energy production," Rachel Martin and Megan Trent, Indiana's News Center, April 25, 2012.** <http://www.indianasnewscenter.com/news/local/Wind-Turbines-Damaged-in-Ohio-148816585.html>