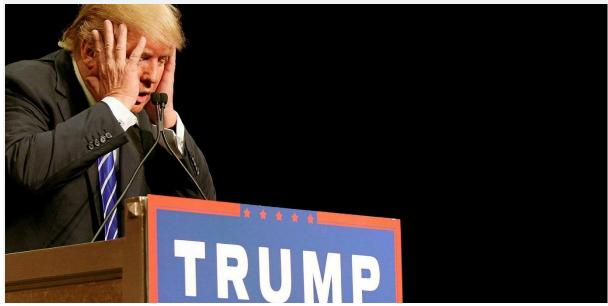


https://www.rechargenews.com/wind/no-president-trump-wind-turbines-cannot-cause-health-problems-long-term-study/2-1-795319



President Donald Trump.Photo: Getty

## No, President Trump, wind turbines cannot cause health problems: long-term study

Report commissioned by Finnish government shows that infrasound from spinning blades has no physical effect on the human body — but that symptoms could be psychological

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US president Donald Trump may believe that "windmills" cause cancer, but a long-term study into so-called "wind turbine syndrome" — health problems supposedly caused by low-frequency sound from spinning blades — has concluded that this "infrasound" has absolutely no physical impact on the human body.

The study conducted by the Technical Research Centre of Finland (VTT) and others, commissioned by the Finnish government, found that infrasound — sound waves with frequencies below the range of human hearing — cause no measurable changes in the human body, and cannot in any way be detected by the human ear.

It claims to be the first long-term study into the impact of wind turbine infrasound.

People living close to wind farms have long claimed that turbine infrasound has caused health problems including headaches, sleep problems, night terrors, tinnitus, mood problems such as anxiety and irritability, concentration and memory problems, dizziness and nausea. But the study, which began in August 2018, concludes that these cannot have been physically caused by wind turbines.

"It was found that symptoms intuitively associated with wind turbine infrasound were relatively common, but the symptoms were not caused by exposure to infrasound," said VTT.

The report points out that WTS symptoms may be psychosomatic — due to the so-called "nocebo effect", a phenomenon often seen in medical trials, in which a harmless substance creates harmful effects in a patient. In other words, a person's strong belief that they will get health problems can actually cause health problems. Some people may also be incorrectly assigning blame for underlying health issues to wind turbines, the study adds.

## Study details

The project, which focused on areas where local residents had reported WTS symptoms, took a three-pronged approach — a long-term infrasound measurement campaign, a questionnaire study and "listening tests".

It found that 15% of people living within 2.5km of a wind farm experienced WTS symptoms, compared to 5% for those living up to 20km away.

Infrasound measurements were taken inside and outside local dwellings near two Finnish wind farms, as well as inside the facilities and beyond them, for 308 days.

Measurements showed that the infrasound levels in rural areas with wind farms were about the same as levels in a regular urban environment.

"Infrasound samples representing the worst-case scenarios were picked out from the measurement data and used in the listening tests," said VTT.

"The participants in the listening tests were divided into two groups based on how they reported wind turbine infrasound related symptoms: people who suffered from those and people who never had symptoms.

"The participants were unable to make out infrasonic frequencies in wind turbine noise, and the presence of infrasound made no difference to how annoying the participants perceived the noise, and their autonomous nervous system did not respond to it. There were no differences between the results of the two groups.

## No evidence of health effects of wind turbine infrasound was found.

"No evidence of health effects of wind turbine infrasound was found."

The results support the conclusion from previous smaller studies.

A New Zealand study from the early 2010s suggested that wind turbine syndrome (WTS) may actually be caused by the fear generated by anti-wind campaigners. This report by the University of Auckland found that people primed about the potential health effects of turbines reported more WTS symptoms after being exposed to infrasound — both real and fake — than those who had not been primed.

In 2013, Simon Chapman, a professor of public health at the University of Sydney, called the syndrome a "communicated disease" — one that is spread by information. He found that of the 120 people to have complained about WTS in Australia, 81 lived near just five of the country's then 49 wind farms, each of which had been heavily targeted by wind farm opponents warning of potential health impacts.

The latest study was conducted by VTT, the University of Helsinki, the Finnish Institute of Occupational Health and the Finnish Institute for Health and Welfare, and funded by the Finnish government's Analysis, Assessment and Research Activities (VN TEAS) office.(Copyright)