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“Wind Turbine Syndrome” F.A.Q’s

1. What is “Wind Turbine Syndrome?”

Wind Turbine Syndrome (“WTS”) is an alleged condition proposed by pediatrician Dr Nina Pierpoint¹. She cites a range of physical sensations (tinnitus, headache etc.) and effects (sleeplessness, anxiety etc.) based on a series of interviews comprising of a study group of 10 self -selected families.

This is a self published report, and Dr Pierpoint is a known anti-wind campaigner in North America. Perhaps more importantly none of her research has been published in a single peer reviewed medical journal. The issue under debate is another example of bad science, which is not only misleading but damaging and disruptive.

2. Is this research scientifically credible?

No. Although the case series methodology is a recognized research technique the methods used in this study are fundamentally flawed. There are numerous examples of problems with the research, all of which cast serious doubt on its quality

- The evidence presented is based on only 10 families. Such a small sample cannot be regarded as statistically reliable. The NHS news website stated that *“The study design was weak, the study was small and there was no comparison group².”*
- The NHS website also states *“There is also no information on how the group was selected in the first place and some uncertainty as to which countries these people come from.”*
- There is no clinical baseline for the study and no case control group to validate the research, both of which are standard practice in any responsible research of this nature.
- The research has not been published in any peer reviewed academic or medical journal.
- The evidence makes the very simple mistake of concluding that a “correlation proves causation”. This is wrong.
- The attempt to imply the industry will discount the health problems as merely “imaginary or psychosomatic” are not substantiated and ignore decades of scientific evidence on noise and vibration.

1. N Pierpoint, Wind Turbine Syndrome (2009) (Draft Pre-publication)

2. <http://www.nhs.uk/news/2009/08August/Pages/Arewindfarmsahealthrisk.aspx>

3. N Todd (2009) Tuning and sensitivity of the human vestibular system to low-frequency vibration.

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3. Can wind turbines produce 'harmful low frequency noise'

No. Academics who specialize in low frequency sound have discounted Pierpoint's claims, not least because they ignore decades of established medical research. Although the book uses Manchester University's recent research³ into the workings of the human ear to justify its conclusion, the author of that research, Dr Neil Todd, has stated:

"Our work does not provide the direct evidence suggested...I do not believe that there is any direct evidence to show that any of the above acoustico-physiological mechanisms are activated by the radiations from wind turbines."

Research by G Leventhall⁴ in the peer-reviewed journal Canadian Acoustics examined whether or not wind turbines produce infrasound at levels that can impact humans. Specifically it refuted the allegations about infrasound, which the research concluded was "irrelevant and possibly harmful, should they lead to unnecessary fears"⁵.

4. Are wind farms noisy?

In 2007, as part of research into wind farm noise commissioned by the government, the University of Salford surveyed all local authorities in the UK where wind farms were in operation. Out of all UK wind farms (133 at the time of the report operating for up to 16 years), only one wind farm has ever been found guilty of causing a nuisance to the nearest residents – and the issue has since been resolved through management of the turbine control system. In comparison, the report highlights that in one year alone (and for only 69% of local authorities in England and Wales, not the entirety of the UK), there were 39,508 cases of noise nuisance not related to wind farm noise."

4. Infrasound from Wind Turbines – Fact, Fiction or Deception?" by Geoff Leventhall in Vol. 34 No.2 (2006)

5 www.wind.appstate.edu/reports/06-06Leventhall-Infras-WT-CanAcoustics2.pdf

6. <http://www.euro.who.int/document/eehc/ebakdoc08>.

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5. So why are wind turbines now being built offshore?

The move to building offshore is not based on health grounds. It is a logical next step in maximising wind yields and follows developments in wind technology and deployment. There is a tremendous wind energy resource offshore, and this is the next frontier in wind energy development.

6. Are wind turbines safe?

Yes. Wind power perhaps represents the most benign of all available options for electrical generation.

The World Health Organisation⁶ was quite categorical in its analysis that wind power represents one of the most benign of all forms of electrical generation (alongside some other renewable technologies) in terms of direct and indirect health effects. There is no safer or healthier alternative.

Despite over 100,000 turbines now installed globally there remains no peer reviewed evidence of any health concerns with wind turbines.

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