

## *Nina Pierpont, MD, PhD*

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Opening Remarks to the:

SENATE COMMUNITY AFFAIRS REFERENCES COMMITTEE

PUBLIC HEARING PROGRAM

FRIDAY, 25 MARCH 2011

MAIN COMMITTEE ROOM, PARLIAMENT HOUSE, CANBERRA

INQUIRY INTO THE SOCIAL AND ECONOMIC IMPACTS OF RURAL WIND FARMS

My name is Nina Pierpont. I am a physician in the United States.

My MD is from the Johns Hopkins University School of Medicine (1991), and I have a PhD in Population Biology from Princeton University (1985) and a Bachelors In Biology (1977) from Yale University.

I am a board-certified pediatrician and a Fellow of the American Academy of Pediatrics.

I practice Pediatrics and Behavioral Medicine (children & adults) in rural northern NY state.

I am the author of the book, *Wind Turbine Syndrome: A Report on a Natural Experiment*, published in November 2009.

Thank you for inviting me to testify today.

Wind Turbine Syndrome is a uniform collection of signs and symptoms experienced by a significant proportion of people living near large wind turbines.

The symptoms include sleeplessness, headaches, nausea, dizziness, tinnitus, ear pressure and pain, and eye pressure and pain; episodes of alarm and panic awakening people from sleep with physical symptoms of an adrenalin surge, like pounding heart; frequent night-time urination and enuresis; and problems with cognition and performance including difficulty reading, loss of short-term memory and concentration, and deficits in spatial memory and problem-solving.

The signs or physical findings include elevated blood pressure.

This collection of symptoms, including the cognitive problems, is well-known to ear nose and throat doctors who specialize in balance or inner ear vestibular problems (otolaryngologists & neuro-otologists). It is also well known to physicists who have worked with low-frequency noise and infrasound in military, naval, and space program settings.

The association of noise and night noise with learning problems in children and with blood pressure elevation and increased cardiovascular risk is well-known to many scientists who have studied the effects of noise in large European epidemiologic studies, and well known to the World Health Organization, which has published guidance on community noise and night noise in the last 12 years.

Experimental studies in the United States and elsewhere are producing new evidence on the physiological effects of infrasound and low frequency noise on the inner ear, establishing the links in the physiologic chain from turbine-produced low frequency noise and infrasound to effects on the human brain and body.

Studies to date include my case-crossover study and series of case collections here in Australia, in the United Kingdom, and in Ontario Canada. More studies are needed, but substantial caution is warranted while these studies around existing wind farms are carried out. There are specific government actions which could be taken both to protect the citizenry and to make large-scale epidemiologic studies feasible.

Australia is an excellent place for these studies to be undertaken. You have lots of turbines and affected people, and a superb leader in Dr. Sarah Laurie, who has already taken the study of Wind Turbine Symptoms beyond my focus, which was the symptoms of inner ear disturbance and associated panic and who is susceptible. She is gathering information on the physical manifestations—elevated blood pressure, hypertensive crises, and heart attacks without evidence of coronary artery disease.

#### Recommendations:

- 1) Invalidate all gag clauses (aka “non-disclosure agreements”) and forbid these in future.
- 2) Make wind companies responsible for property value of displaced people. *If there is no health problem, as the wind turbine developers and industry associations maintain, then neither of these measures will create any cost or detriment to the developers.*
- 3) I also recommended moratorium on new development for two years, along with adequate funding for an independent epidemiologic study (meaning, independent of the industry).
- 4) Safe setback in Australia is in the range of 10 km, not the 2 km I proposed in my book.