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## Book Review

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*Wind Turbine Syndrome: A Report on a Natural Experiment*

Nina Pierpont, MD, PhD

Santa Fe, NM: K-Selected Books, 2009. Paperback.  
ISBN 10 0-9841827-0-5.

The book *Wind Turbine Syndrome: A Report on a Natural Experiment* by Nina Pierpont is a contribution to the general discussions of the effect of environment on health, with a focus on patient complaints associated with wind turbines. The author became interested in and aware of a cluster of patient complaints in her community in which wind developers became established.

Significantly, these complaints are cited to include “migraine, motion sickness, vertigo, noise and visual and gastrointestinal sensitivity and anxiety.” The interest in these complaints about wind turbines by the author and her husband led her to investigate the multiple influences in patients of low-frequency noise, neurological phenomena of spatial memory loss, fear, balance disorders, tinnitus, and stress. The investigation (in the format of a case series) provided to the author a “natural experiment”: a circumstance wherein subjects are exposed to experimental conditions both inadvertently and ecologically (within their own home environments).

The reader shares in these clinical experiences and is stimulated to consider the short- and long-term effects of noise exposure—specifically “low-frequency vibrations”

—on multiple organ systems. The significant association of interference in concentration and memory suggests that a primary effect of low-frequency vibrations is that of interference in brain function.

Of particular interest is identification of a “visceral vibratory vestibular disturbance (VVVD): a sensation of internal quivering, vibration, or pulsation accompanied by agitation, anxiety, alarm, irritability, rapid heartbeat, nausea, and sleep disturbance” and the significant “correlation of the occurrence of new or worsened tinnitus in the presence of turbines with previous noise exposure, tinnitus prior to exposure, and baseline hearing loss.”

The author is to be congratulated on this book. It is scholarly and a serious work that attempts to understand a multiple symptom complex related to low-frequency vibrations. The author suggests the creation of a case-definition for a wind turbine syndrome.

This book is recommended to all medical disciplines and environmentalists. It is particularly suited to professionals, both medical and nonmedical, who are involved in the differential diagnosis of inner-ear disease; central nervous system disease; associated complaints of concentration, memory, and hearing loss; tinnitus; and vertigo. The work should appeal equally to scientists and politicians involved in discussions of wind energy technology and its effect on humans and the environment.

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