

SUMMARY OF FINDINGS

by Christopher Wallace

for the Grafton SB Wind Turbine Health Committee

*** There is no credible evidence to date in the indexed peer-reviewed professional medical and scientific literature to support the claim that wind turbines operating within legal limits harm human health.**

*** The professional and popular literature do both acknowledge an association between wind turbines and annoyance.**

*** While there are anecdotal reports of wind turbine induced sickness, no research anywhere has been able to demonstrate causality or predict any such probability. There is reporting that would support a nocebo, or psychogenic (i.e., having a psychological origin or cause rather than a physical one), effect.**

*** 'Wind turbine syndrome' does not exist and does not appear in the US National Library of Medicine PubMed database.**

***The limited 'research' literature that attempts to suggest a physiological impact of turbines on human health has been carried out primarily by sitting board members of anti-wind groups, has been deemed at best exploratory, not conclusive, and consistently fails to demonstrate causality or withstand peer and judicial reviews. (Ex: Nissenbaum, Horner, Krogh, Salt, Hanning, Jeffery, Phillips, Pierpont, Laurie)**

The Vermont Department of Health has concluded 'that there is no direct health effect from sound associated with wind turbine facilities.'(1)

The Vermont Journal Law (Vol 13. Issue 4) states 'of the more significant issues litigated in wind power dockets, questions concerning the impact upon public safety and health have tended to be the least controversial.' (2)

An Independent Expert Panel (Ellenbogen, Harvard Medical School; Grace, Mechanical Engineering BU; Heiger-Bernays, Environmental Health BU; Weiskopf, Environmental Health & Epidemiology, Harvard School of Public Health) reviewing the scientific literature reported (2012) 'There is no evidence for a set of health effects, from exposure to wind turbines, that could be characterized as "Wind Turbine Syndrome."' The same study notes that 'perceived sound decreases rapidly with the distance from wind turbines. Typically, at distances larger than 400 m, sound pressure levels for modern wind turbines are less than 40 dB(A), which is below the level associated with annoyance in the epidemiological studies reviewed.' (3)

Another multi-disciplined review of the professional literature, led by Dr. RJ McCunney, Massachusetts Institute of Technology, found that 'no clear or consistent association is seen between noise from wind turbines and any reported disease or other indicator of harm to human health.' The review also concludes that attitude toward wind turbines has 'been correlated with self-reported annoyance; and Annoyance does not correlate well or at all with objective sound measurements or calculated sound pressures.' (4)

The Australian Government National Health and Medical Research Council (NHMRC) in 2015 'concludes that there is currently no consistent evidence that wind farms cause adverse health effects in humans.'(5)

Health Canada (the federal health agency of Canada) released results of a major study, the largest and most comprehensive to date, which studied over 1200 residences and their inhabitants in relation to sound from 399 neighboring turbines on PEI and in Ontario. 'No evidence was found to support a link between exposure to wind turbine noise and any self-reported illnesses. No association was found between multiple measures of stress and exposure to wind turbine noise.' Likewise, the results 'did not support an association between wind turbine noise and self-report or measured sleep quality.'(6)

(1) http://healthvermont.gov/pubs/healthassessments/documents/wind_turbine_sound_10152010.pdf

(2) <http://vjel.vermontlaw.edu/files/2013/06/Ridgelines-and-the-National-Security-Implications-of-Commercial-Wind-Energy-Development-in-Vermont.pdf>

(3) <http://www.mass.gov/eea/docs/dep/energy/wind/turbine-impact-study.pdf>

(4) http://journals.lww.com/joem/Fulltext/2014/11000/Wind_Turbines_and_Health_A_Critical_Review_of_the.9.aspx

(5) <https://www.nhmrc.gov.au/health-topics/wind-farms-and-human-health>

(6) <http://www.hc-sc.gc.ca/ewh-semt/noise-bruit/turbine-eoliennes/pamphlet-brochure-eng.php>