

**Falmouth Board of Health
Hearing
Health Effects of Wind Turbines
May 24, 2012**

Oral and written testimony on wind turbine effects were submitted to the Board at a public hearing on May 24th, 2012, and further written testimony was accepted during the following week (until May 31st, 2012). Additional complaint reporting has been ongoing since April 2011, and is summarized separately. The testimony from May 2012 represents 63 individuals, and includes 47 individuals with self-reported health effects. Only written testimony is included in the following analysis.

The submitted written testimony is included in this package of data, and summarized in the tables below. Table 1 describes the number and type of testimony submitted; Table 2 summarizes the health effects; and Table 3 defines the health effects categories. The summary data is derived from a spreadsheet analysis of the written testimony, also attached. We have also mapped the location of the respondents' homes in relationship to the wind turbines, attached as Figure 1.

The major health effect reported was sleep deprivation (85%) with attendant stress (53%), mental health problems (45%), hearing problems (32%), cognitive difficulties (25%), and other effects, summarized in Table 2 below. The testimonials

Table 1. Number and type of testimony submitted

Total number of testimonies submitted	58
Testimonies not meeting criteria for hearing	1
Total number of valid testimonies	57
Number of people represented	63
Testimonies with health effects	41
People with health effects	47
Testimonies with no health effects	15
- People employed at Technology Park	12
- People who live near Wind 1, Wind 2	3

Table 2. Number and Percent of People with Health Effects by Specific Category of Health Effect

Category	Number	Percent
Sleep Deprivation/ Fatigue	40	(85.1%)
Stress	25	(53.2%)
Cognitive difficulty Decreased memory, concentration	12	(25.5%)
Hearing problems Pressure, tinnitus, pain	15	(31.9%)
Headache	11	(23.4%)
Mental Health Problems Depression, mood disorders, anxiety	21	(44.7%)
Systemic symptoms Increased BP, P, palpitations	10	(21.3%)
Difficulty with spatial relationships Vertigo, loss of balance	6	(12.8%)
Eye problems	3	(6.4%)
Difficult interpersonal relationships	2	(4.3%)
Thoughts of or attempted suicide	2	(4.3%)
Have symptoms; requested interview	6	(12.8%)
Total number with health effects	47	

6/11/2012

Table 3. Spreadsheet Category Definitions.

Self-reported symptoms from attached testimony were categorized using the following definitions to produce Table 2.

Category	Definitions
Effects	(Yes/no)
Sleep	Disturbance, deprivation, waking up at night
Stress	Mentioned stress in dialog
Cognitive	Decreased memory, decreased concentration, confusion
Ear symptoms	Pressure, tinnitus, throbbing
Fatigue	Tiredness; (combined with sleep)
Headache	Pressure in head, headache
Anxiety	(Combined with mental health)
Spatial Relationships	Clumsiness, vertigo, balance problems
Eye	Burning, dry
Mental Health	Depression, mood disorders, (anxiety)
Inter-personal relationships (IPR)	Separation, difficulty with people
Suicide	Thoughts, attempted

Nausea	Vomiting (combined with systemic symptoms)
Better	Better when out of geographical area
Interview	Have health effects, requested DPH confidential interview
Other	Decreased property values, need to leave home, need to sleep in basement or elsewhere, inability to enjoy property