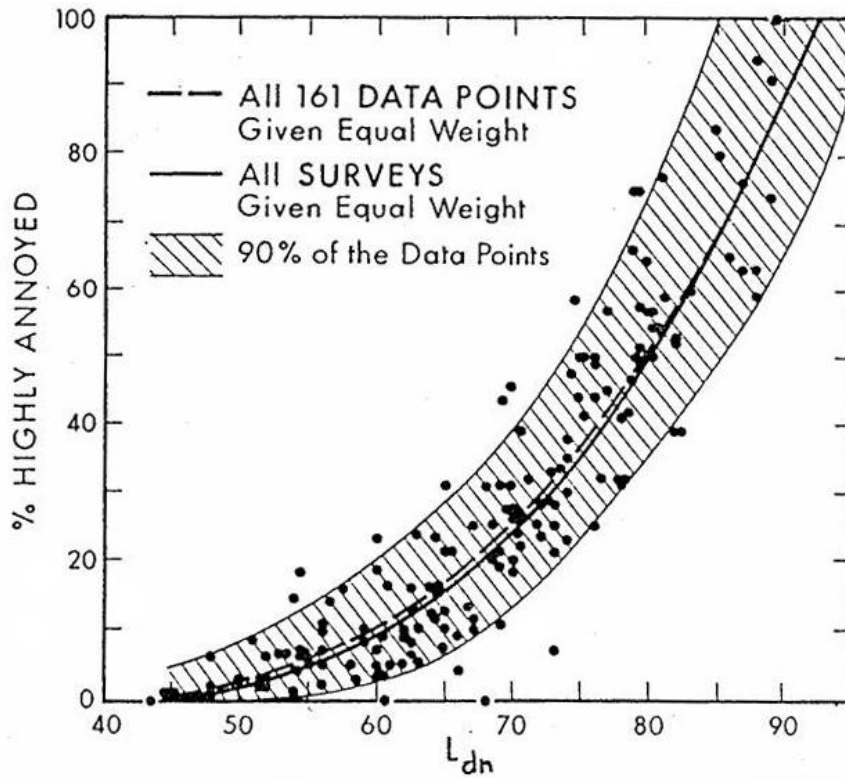


Miles 0 1

- Installation Boundary
- Burlington International Airport Boundary
- Baseline Contours (DNL)**
- ANG Scenario 2 Noise Contours (DNL)**
- 65 dB
- 70 dB
- 75 dB
- 80 dB
- 85 dB

- Representative Noise Receptors**
- Place of Worship
 - School
 - Residential Locations
 - Hospital



Schultz, 1978, Synthesis of Social Surveys on Noise Annoyance in Journal of the Acoustical Society of America Vol. 64, No. 2, 383-384

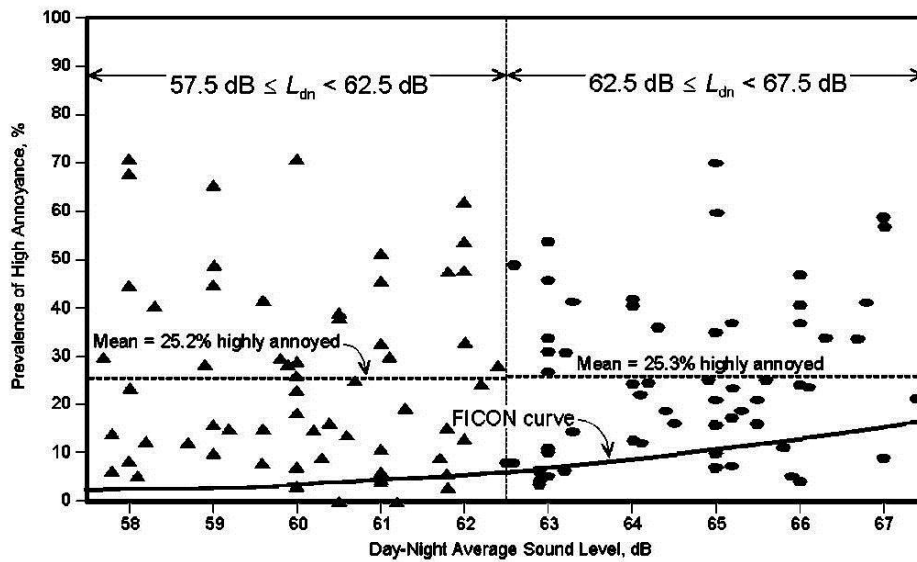


FIG. 6. Expanded view of data on prevalence of aircraft noise-induced annoyance in the vicinity of $L_{dn}=60$ and 65 dB.

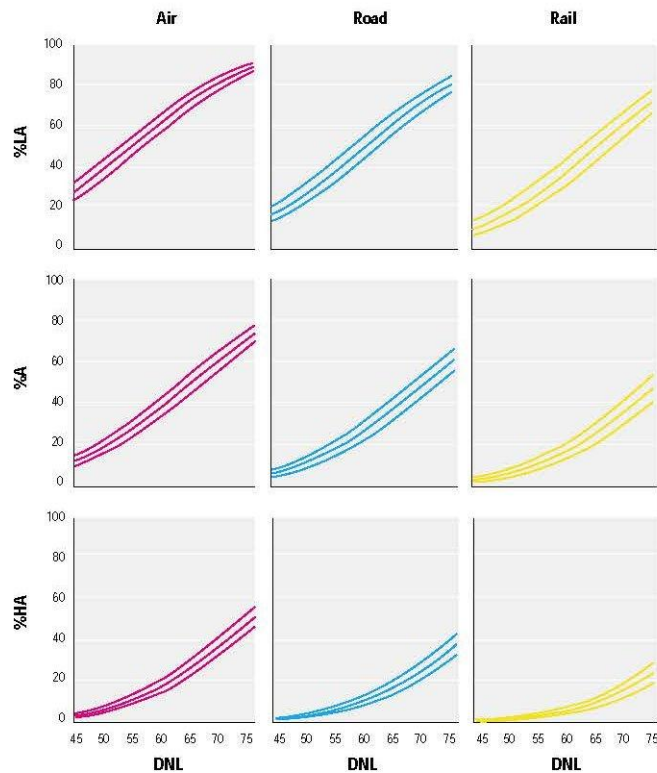


Figure 1. The %LA (top row), %A (middle row), and %HA (bottom row) for air-craft, road traffic, and railways as a function of DNL, together with 95% confidence intervals. The curves were found by fitting Equation 4 to the data from field surveys (see Table 2). The estimates of the parameters are given in Table 3.

Miedema and Oudshoorn, 2001, Annoyance from Transportation Noise: Relationship with Exposure Metrics DNL and DNEL and Their Confidence intervals, in Environmental Health Perspectives, Vol. Number 4, 409.

Cardiovascular diseases

The evidence from epidemiological studies on the association between exposure to road traffic and aircraft noise and hypertension and ischaemic heart disease has increased during recent years. Road traffic noise has been shown to increase the risk of ischaemic heart disease, including myocardial infarction. Both road traffic noise and aircraft noise increase the risk of high blood pressure. Very few studies exist regarding the cardiovascular effects of exposure to rail traffic noise.”

WHO, 2011, Burden of Disease from Environmental Noise, xv

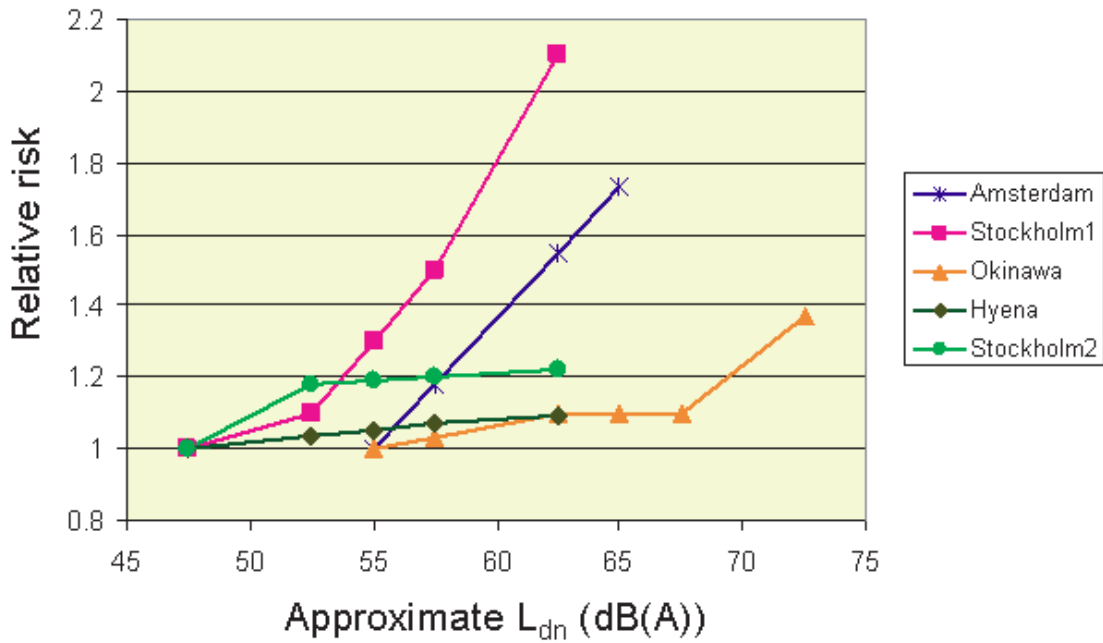


Fig. 2.4. Association between aircraft noise and the prevalence or incidence of high blood pressure

WHO, 2011, Burden of Disease from Environmental Noise

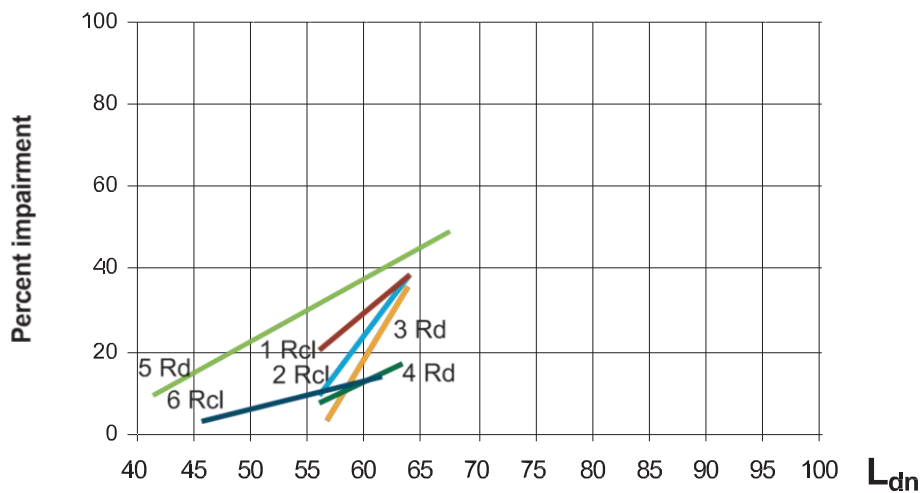


Fig. 3.1. Exposure-response curves from different epidemiological studies [Impairment of Children]

Notes. Rd = reading; Rcl = memory, recall

1 = recall, children, old airport (10).

2 = recall, children, new airport (10).

3 = reading, children, old airport (10).

4 = reading, children, new airport (10).

5 = reading, children (11).

6 = free recall, children (17).

WHO, 2011, Burden of Disease from Environmental Noise, 48

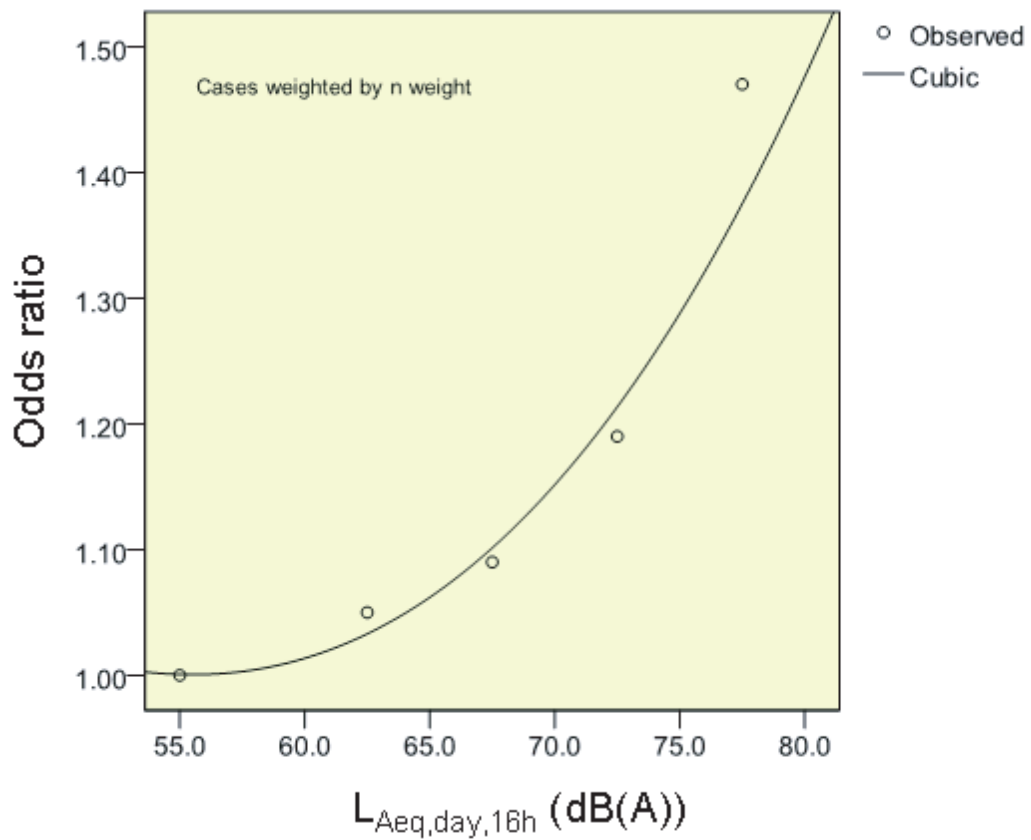


Fig. 2.3. Polynomial fit of the exposure-response relationship for road traffic noise and the incidence of myocardial infarction

Source: Babisch

WHO, Burden of Disease, 22

Mr Blomberg,

Unfortunately, I cannot send you the noise model files. There are various reasons. Please use the conclusions from the draft EIS regarding noise in your briefing.

Sincerely,

Nicholas M. Germanos, Project Manager
 ACC/A7PS
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