Noisy roads increase risk of high blood pressure

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Traffic noise raises blood pressure. Researchers writing in BioMed Central's open access journal *Environmental Health* have found that people exposed to high levels of noise from nearby roads are more likely to report suffering from hypertension.

Theo Bodin worked with a team or researchers from Lund University Hospital, Sweden, to investigate the association between living close to noisy roads and having raised blood pressure. He said, "Road traffic is the most important source of community noise. Non-auditory physical health effects that are biologically plausible in relation to noise exposure include changes in blood pressure, heart rate, and levels of stress hormones. We found that exposure above 60 decibels was associated with high blood pressure among the relatively young and middle-aged, an important risk factor for cardiovascular diseases such as heart attack and stroke".

In total, approximately 30% of the population in the European Union is exposed to a day-night average of traffic noise exceeding 55dB(A), and this number is increasing. Bodin and his colleagues used health survey questionnaires for 27,963 people living in Scania in southern Sweden and related this information to how close the respondents lived to busy roads. Modest exposure effects were generally noted in all age groups at average road noise levels below 60 dB(A). More marked effects were seen at higher exposure levels among relatively young and middle-aged people, whereas no effects at higher levels were discerned in the oldest age group (60 - 80 years old). Speaking about this age-effect, Bodin said,

"The effect of noise may become less important, or harder to detect, relative to other risk factors with increasing age. Alternatively, it could be that noise annoyance varies with age".

More information: Road traffic noise and hypertension: results from a cross-sectional public health survey in southern Sweden; Theo Bodin, Maria Albin, Jonas Ardo, Emilie Stroh, Per-Olof Ostergren and Jonas Bjork; *Environmental Health* (in press); www.ehjournal.net/

Source: BioMed Central (news : web)

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