

BAD FOR SLEEP, WORSE FOR BODY

HOW DOES NOISE AFFECT PEOPLE'S HEART

We get habituated to higher decibel car horns or speeding trains if we are exposed to the noise on a daily basis, but our cardiovascular system doesn't

IMMEDIATE IMPACT

1 THE NERVOUS SYSTEM

Loud sound affects it and changes deep sleep into a lighter stage of sleep



2 BLOOD PRESSURE

Supposed to be low during sleep, but rises with every noisy interruption

3 HEART RATE

Registers an increase

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LONG-TERM EFFECTS

> Cycle of noise pollution-poor sleep-brain stimulation (leading to a neuroendocrine or hormonal response) can lead to atherosclerosis (buildup of plaque in the blood vessels)



> If coupled with stress, loud noise increases levels of stress hormones (such as cortisol) and hikes risk of hypertension, stroke, heart failure and immune problems

> Acute exposure to noise activates nervous and hormonal responses, leading to temporary increase in blood pressure, heart rate and vasoconstriction

(Adapted from Environment Health Perspectives in Feb 2014)

STUDY SHOWS NOISE EXPOSURE INCREASES RISK

> Exposure to traffic (air, rail and road) noise increases one's risk of having a heart attack, says newly released Noise-Related Annoyance, Cognition, and Health study findings

> Researchers analyzed data of over a million Germans over the age of 40. Their addresses were mapped with respect to road, rail, and traffic noise exposure. They compared exposure to traffic noise of 19,632 patients who had suffered a heart attack with 8,34,734 people who had not suffered a heart attack

> The study found a 'statistically significant' association between noise exposure and death caused by heart attacks

> It found that people exposed to noise levels of 60 to 65 decibels had a 9% increase in risk, and those exposed to more than 70 decibels a 13 % increase