



Night-time noise increases blood pressure

The din of modern life may be harmful to your health. The sound of an aeroplane flying overhead, a car passing by, even sleeping next to a snorer may not be enough to wake you, but these noises at night could be giving your blood pressure an unwelcome boost, even as you sleep, a new study appearing in the *European Heart Journal* shows.

The study included 140 healthy men and women living near four European airports with night flights, including London's Heathrow. The volunteers ranged in age from 45 to 70 years old. The researchers measured the volunteers' blood pressure using a remote device at 15-minute intervals and then examined how it related to the noises recorded in their bedrooms.

Aircraft noises caused an average increase in systolic blood pressure (top number of blood pressure reading) of 6.2 points and an average increase of diastolic blood pressure of 7.4 points (bottom number). But it wasn't only airplane noise that raised blood pressure; road traffic and

snoring also increased it. So how loud is too loud? Any sound louder than 35 decibels was deemed a "noise event" by the researchers.

The researchers note that the higher the decibel level, the louder the noise and the more blood pressure it rose. People with high blood pressure, also called hypertension, have an increased risk of developing heart disease, stroke and kidney problems. Blood pressure of 140 over 90 or higher is high blood pressure.

Also note that high frequency sounds of 2 to 4,000 megahertz are the most damaging. Aging also causes gradual hearing loss, mostly in the high frequencies. Speech reception is not seriously impaired until there is about 30 decibel loss; by that time severe damage may have occurred.

Various psychological difficulties can also be related to noise exposure. The incidence of hearing loss among classical musicians has been estimated at 4 to 43 per cent, in rock musicians it is as high as 13 to 30 per cent.

The average decibel levels for everyday sounds are:

- Quiet room: 40 decibels
- Vacuum cleaner: 70 decibels
- Rock music: 110 decibels
- Loud horn: 140 decibels