Noise pollution can affect outcomes in schools and hospitals

- Every effort should be made to check noise levels in these settings
- Noise pollution is also responsible for many health problems

New Delhi, 10 September, 2017: As per statistics, continuous exposure to sounds above 85 db can cause progressive hearing loss. Everyday exposure to noise over time has an impact upon our ability to hear and on the degree of hearing loss that develops. As per the IMA, noise-induced hearing loss is the most common and obvious outcome of noise pollution.

Noise pollution has been associated with many health problems such as stress, anxiety, high blood pressure, increased heart rate, and heart disease. It can also manifest as disturbed sleep/ insomnia, headache, fatigue, irritability, loss of concentration, and decreased work efficiency. The most commonly affected places due to noise pollution are classrooms and hospital settings.

Speaking about this, Padma Shri Awardee Dr K K Aggarwal, National President Indian Medical Association (IMA) and President Heart Care Foundation of India (HCFI) and Dr RN Tandon – Honorary Secretary General IMA in a joint statement, said, “Noise levels are an increasing concern in class rooms and hospitals. The source of noise can be external such as street traffic, playground noise, and airplanes or internal such as hallway noises and noise from other rooms. Noise in a classroom is not conducive to learning and interferes with auditory communication, adversely affecting speech perception and recognition. Hospitals are high-stress environments. A noisy environment in a hospital affects complex tasks and reduces concentration. Failure to hear a warning signal or alarm over the general background noise in an ICU can also have potentially catastrophic outcome.”

Speech intelligibility or understanding is determined by the signal to noise ratio, which should be at least 15dB. That is, the teacher should speak at least 15 db louder than the noise in the classroom for the student to optimally comprehend what is being said. For clear speech perception, the background noise levels should not exceed 35 dB in schools as recommended by the WHO.

Adding further, Dr Aggarwal, said, “Noise can interfere with oral communication leading to medication errors due to orders that are misunderstood. Schools and hospitals are ‘silence zones’. Every effort should be made to reduce noise levels in hospitals for optimum delivery of health care and in schools for maximum retainability and attention span in children.”
Here are some ways to reduce noise pollution in such areas.

- Traffic flow around these areas should be minimized as much as possible.
- Signboards displaying ‘Silence zone’, ‘No honking’ must be placed near schools and hospitals.
- Efforts should be made to ban the use of horns with jarring sounds, motorbikes with damaged exhaust pipes, and noisy trucks.
- The use of loudspeakers in parties and discos, as well as public announcements systems should be checked and discouraged.
- Noise rules must be stringent and strictly enforced near such silence zones.
- Planting trees along roads and in residential areas is a good way to reduce noise pollution as they absorb sound.