

**E1-508: Measurement of noise levels at the vicinity of hospitals**

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A study was carried out to determine the noise levels in and around hospital areas where patients need comfort for speedy recovery. A total of seventeen hospitals were selected for this work; namely, eleven government hospitals, three Ayurvedic hospitals and three private hospitals. In each location, noise measurements were taken during morning, evening and night. Noise levels were measured at each location for a time period of not less than the 5 min. Several noise level descriptors were recorded during the measurement. In each location, following measurement points were selected, near the hospital boundaries, hospital main entrances, OPD areas, consulting rooms and wards. A total of 853 measurements were taken and analyzed.

Study reveals that about 45% of the government hospitals, outdoor noise levels at the boundary exceeded prescribed levels for silent areas. About 5% exceed noise levels prescribed for high noise areas during morning session and 10% exceeds noise levels prescribed for high noise areas during night session. In addition, very high noise levels observed in the government hospital wards where over 85% hospitals exceeded recommended levels for all three sessions.

All private hospitals (100%) exceeded prescribed noise levels for silent areas at their boundaries for all sessions. Noise levels at main entrances too were high in private hospitals compared to government hospitals. Especially, in evening and night sessions the disparity between the private and government hospitals becomes quite evident. However, in wards of private hospitals, noise was comparatively better (only 30% exceeding recommended levels) providing a better comfort to patients. The study indicates the necessity of awareness, warning signs and enforcing the existing noise regulations to uplift the current standards.