Research and Analysis on the Current Situation of the Noise Pollution in Xi'an City's Acoustic Environmental Domains

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Background and Aims: To find out the noise pollution situation in the acoustic environmental domains in Xi'an city **Methods:** Measure the noise level in Xi'an city's domains day and night during the period of January to June, from year of 2007 to year of 2009 and report the monitor result in the seasonal average equivalent sound level.

Results: The monitor result of the noise pollution in Xi'an city's five kinds of acoustic environmental domains is listed as follows: Special residential area's daytime noise in the first season is within the national standard, which exceeds the national standard in the second season from year of 2008, the night noise is all beyond it; the relevant indexes of Residential culture and education area are all exceed the national standard; The mixed area's daytime noise is within the limit in the recent years; while its nighttime noise is only within the national standards in 2010; The industrial area's daytime and nighttime is all beyond the limit; The area around the main transportation routes has qualified daytime noise for all four season, yet the night noise is beyond the limit.

Conclusions: The situation of noise exceeding the national limit exists in all domains in the city, and the night noise situation is more serious. Besides, the noise levels in the night time of the third season in the industrial area and the daytime of the second season of the mixed area have an obvious increase compared with other seasons, which might affect the Xi'an city residents' normal quality of life, and should be controlled.

References:

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