



## HYGIENIC JUSTIFICATION OF INTERNAL NOISE IN GROUP CELLS IN PRESCHOOL EDUCATIONAL INSTITUTIONS

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Little attention is paid to the study of the impact of noise on children's bodies, although there is every reason to believe that the noise level in children's environments influences the development of their neuropsychic stability, and that the hearing organs of preschool children are not yet fully developed. Even moderate noise levels have a negative impact on their health. Therefore, it is extremely important to comply with acoustic hygiene requirements in preschool educational institutions, control the sound environment, and organize the educational process in a quiet environment. To monitor noise levels, group cells of public and private kindergartens located in different areas of the city were selected in order to assess the shortcomings of the building design. A TES-1357 series sound level meter was used to instrumentally measure noise levels in group cells. Children exposed to noise experience increased heart rate, increased blood pressure, sleep disturbances, decreased appetite, general fatigue, and decreased attention. When psychologically and intellectually affected, children experience rapid fatigue, become tearful, have a decreased ability to concentrate and perceive speech, their learning process (memory) slows down, and they become more aggressive or nervous. Growth processes also slow down due to disruption of sleep and rest patterns, immunity decreases, and susceptibility to colds and chronic diseases increases.

According to health regulations, the permissible noise level for preschool-aged children should be approximately 35–45 dB (decibels). Noise above 60 dB negatively impacts the nervous system. Noise levels above 80 dB can cause damage to the auditory analyzer. The results of the study showed that in the group rooms of the State Preschool Educational Institution, the noise level increased by 17-46% of the norm. In group rooms of a private preschool educational institution, the noise level increased by 33-77% of the norm. To conclude, it can be said that preschool institutions should be located in such a way that the noise level in the area of children's playgrounds does not exceed 40 dB. When choosing a location for the construction of preschool buildings, one must be guided by preliminary data from noise intensity measurements on the streets, the area of the block, and the land plot of the proposed construction. If there are no areas isolated from noise sources, then before the construction project is approved,





measures must be taken to reduce background noise to 40 dB. The data from the study of noise levels in group cells of preschool educational institutions were regulated by sanitary rules and regulations No. 0355-18 “Sanitary and hygienic requirements for the maintenance, arrangement and organization of the operating mode of preschool educational institutions in the Republic of Uzbekistan”.

