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HYGIENIC CHARACTERISTICS OF MODERN INDOOR SCHOOL FACTORS

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Abstract

This paper presents the results of assessing the health status of children and adolescents studying in various types of modern educational institutions, as well as the impact of indoor school environment factors on the educational process. The following environmental factors of the studied private and public schools were analyzed: humidity, temperature, air velocity, pressure, Formaldehyde HCHO ($\mu\text{g}/\text{m}^3$), noise levels (db), and illumination in classrooms. An analysis was conducted on optimizing indoor school factors, improving air quality, and enhancing the conditions for education and upbringing.

Keywords: environmental pollutants, school environment factors, school temperature.

The purpose of the study improvement of hygienic recommendations aimed at optimizing indoor school factors that influence the physical development and health status of children and adolescents studying in schools.

Research materials. Private and public schools: indicators and conditions of humidity, temperature, air velocity, pressure, Formaldehyde HCHO ($\mu\text{g}/\text{m}^3$), noise (dB), and illumination levels in classrooms.



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Research methods. Instrumental, analytical, sanitary-hygienic, biochemical, and statistical research methods were utilized.

The atmospheric formaldehyde level was measured using a PPM formaldimeter. Natural and artificial illumination levels were determined with a TES-1330A Digital Illuminance Meter. Indoor temperature, relative humidity, and air velocity were measured using the Meteoskop-M device. Noise levels in school classrooms were evaluated with a TES-1357 Sound Level Meter.

Meteoskop-M TV-Temperature indicators in schools In public schools, the temperature in the 1st floor south-east classroom at the beginning of the lesson was 22.11 ± 0.571 and at the end of the lesson was 24.14 ± 1.11 . The temperature in the 1st floor north-west classroom at the beginning of the lesson was 21.96 ± 0.65 and at the end of the lesson was 23.56 ± 0.85 . Studies on the temperature of classrooms in public and private schools showed that the temperature increased by 5-6% at the beginning of the lesson and by the end of the lesson. In particular, the temperature in the south-east classrooms increased by 10% compared to the north-west classrooms.