

GENERAL OF RESIDUAL CHLORINE AND ITS IMPACT ON THE HEALTH OF SWIMMING POOL USERS IN SLEMAN

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ABSTRACT

Background : Some swimming pools in Sleman have residual chlorine content that exceeds the quality standard which can cause health problems for the pool users. It is known that 3 out of 5 locations do not meet the quality standards that have been set.

Objective : To determine the picture of residual chlorine and health impacts on users of public swimming pools in Sleman in 2024.

Method : This type of research is descriptive with cross sectional research design. This study was conducted in March 2024 - May 2024 located in several areas of Sleman, Yogyakarta Special Region Province. This study was conducted by taking and testing samples and using a closed written questionnaire regarding the health effects on swimming pool users with data analysis and frequency distribution.

Results : Most of the swimming pools had residual chlorine levels that exceeded the quality standards, chlorine addition that did not use doses, acidity levels that met the requirements, and the majority of swimming pool users were affected by eye irritation as many as 13 people (68%), skin irritation as many as 5 people (26%), and respiratory disorders as many as 1 person (5%).

Conclusion : Most of the impact of health problems is obtained from high residual chlorine levels and water pH at the swimming pool location.

Keywords : Residual chlorine of pool water, pH of pool water, health problems

GAMBARAN SISA KLOR DAN DAMPAKNYA TERHADAP KESEHATAN PENGGUNA KOLAM RENANG DI SLEMAN

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ABSTRAK

Latar Belakang : Beberapa kolam renang di Sleman terdapat memiliki kandungan sisa klor yang melebihi baku mutu yang dapat menyebabkan gangguan kesehatan bagi pengguna kolam renang tersebut. Diketahui terdapat 3 dari 5 lokasi yang tidak memenuhi standar baku mutu yang telah ditetapkan.

Tujuan : Mengetahui gambaran sisa klor dan dampak kesehatan pada pengguna kolam renang umum di Sleman tahun 2024

Metode : Jenis penelitian ini adalah deskriptif dengan desain penelitian *cross sectional*. Penelitian ini dilaksanakan pada bulan maret 2024 – Mei 2024 berlokasi di beberapa wilayah Sleman, Provinsi Daerah Istimewa Yogyakarta. Penelitian ini dilaksanakan dengan cara pengambilan dan uji sample serta menggunakan kuesioner tertulis tertutup mengenai dampak kesehatan terhadap pengguna kolam renang dengan analisis data dan distribusi frekuensi.

Hasil : Sebagian besar kolam renang memiliki kadar sisa klor yang melebihi baku mutu, penambahan zat klor yang tidak menggunakan takaran, kandungan derajat keasaman yang sesuai atau memenuhi syarat, dan mayoritas pengguna kolam renang sebagian terdampak iritasi mata sebanyak 13 orang (68%), iritasi kulit sebanyak 5 orang (26%), dan gangguan perfasan sebanyak 1 orang (5%).

Kesimpulan : Sebagian besar dampak gangguan kesehatan didapatkan dari tinggi rendahnya kadar sisa klor air dan pH air pada lokasi kolam renang.

Kata Kunci : Sisa klor air kolam, pH air kolam, Gangguan kesehatan