

Is Surabaya's Sweltering Heat a Danger to Workers?



EPSK Laboratory



Facts about rising temperatures according to BMKG and other data

For the first time in history, the global average temperature on Friday, 17th November 2023 soared to more than 2 degrees Celsius hotter than the pre-industrial temperatures of 1850–1900.



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Why is Surabaya so hot?



The high temperatures in Surabaya and the East Java region are caused by the sun's movement currently positioned in the southern part of the equator. Consequently, sunlight intensity is higher in the Java to Nusa Tenggara regions.



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The relationship between heat stress, vibration, knowledge of Occupational Health and Safety (K3) and feelings of work fatigue in workers

Heat from an uncomfortable work environment, such as temperatures that above the threshold limit, can have an **influence on work performance and employee health**. If workers exposed to heat, they are unable to maintain their body's normal temperature, **this can trigger the onset of heat stress**.

Workers who wear protective equipment and work in intensely humid environment while performing **heavy physical labor are the most susceptible to heat stress**.

Heat stress can cause a **variety of health problems**, from moderate disorders like heat cramps and heat exhaustion to more serious complications like heat stroke.



How can a heat stress can affect workers kidney ?



Heat stress is a physical hazards that can impact workers and lead to **discomfort, headaches, psychological disturbances, heat stroke**, and in some **extreme cases, even death.**



Many scientists believe that recurring dehydration and heat stress caused by hazardous working circumstances can lead to subclinical renal disorders, which can eventually **lead to permanent loss of kidney function**

