

عنوان مقاله:

Evaluation of occupational and environmental exposure to heat stress based on WBGT index in an industrial unit in Ahvaz city

محل انتشار:

اولین کنفرانس بین المللی سلامت، بهداشت و آموزش (سال: 1403)

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خلاصه مقاله:

Background: Heat is one of the most important physical harmful factors in many work environments. Outdoor workers are exposed to heat from solar radiation and the atmospheric conditions, in addition to the heat from the working process, which is worse by global warming. The purpose of this study was to evaluate heat stress based on wet bulb globe temperature index in an industrial unit in Ahvaz city. Material and Method: This descriptive cross-sectional study was conducted in the summer season and in hot weather conditions in Ahvaz city. Measuring the Wet Bulb Globe temperature index at different times, was done by using WBGT meter device. Before the measurement, the device was placed in the measurement location and at the hottest time of the day for 15 minutes to adapt. And then the obtained numbers were read. Finally, the measurement results with occupational contact limits of pathogenic agents of the Iran health ministry and the OHSAS 18001:2007 standard were compared. Results: The index value for some businesses and measuring stations was more than allowed. In some measurement stations, the work could continue continuously and in some places it was necessary to observe the work and rest schedule. Conclusion: The findings of this study showed that employment in the mentioned industry is considered a health threatening factor for its workers due to the occupational and environmental exposure of its employees to heat. Therefore, it is necessary to plan thermal protection and necessary intervention measures to reduce exposure to thermal stress.

کلمات کلیدی:

Heat Stress Disorder, Wet Bulb Globe Temperature, Occupational and environmental Exposure

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