

## عنوان مقاله:

Health and safety hazards identification and risk assessment in the swimming pools using combined HAZID and ALARP

## محل انتشار:

مجله مدیریت ومهندسی بهداشت محیط, دوره 7, شماره 3 (سال: 1399)

تعداد صفحات اصل مقاله: 10

## نویسندگان:

Mohsen Hesami Arani - *Student Research Committee, Iran University of Medical Sciences, Tehran, Iran*

Nematollah Jaafarzadeh - *Toxicology Research Center , Ahvaz Jundishapur University of Medical Science , Ahvaz , iran*

Peyman Khaleghi Dehabadi - *Department of Occupational Health Engineering, Aran and Bidgol Health Center, Kashan University of Medical Sciences, Kashan, Iran*

Gholamreza Mostafaii - *Department of Environmental Health, School of Health, Kashan University of Medical Sciences, Kashan, Iran*

Moslem Tazik - *Corresponding author: Department of Environmental Health Engineering, Tehran University of Medical Sciences, Tehran, Iran*

Zahra Karimi - *Department of Environmental Health Engineering, Aran and Bidgol Health Center, Kashan University of Medical Sciences, Kashan, Iran*

Ali Etesam - *Department of Environmental Health Engineering, Aran and Bidgol Health Center, Kashan University of Medical Sciences, Kashan, Iran*

Mahdiyeh Mohammadzadeh - *Corresponding author: Social Determinants of Health (SDH) Research Center and Department of Environment Health and Kashan University of Medical Sciences, Kashan, Iran*

## خلاصه مقاله:

Background: Swimming pools are recreation and sport sites where the lack of safety and health can have severe adverse effect on public health. This study aimed to identify and assess health and safety risks using HAZID and ALARP techniques in the different parts of the swimming pools. Methods: In this applied study, health risks were identified by field observations and environmental health questionnaire consisting swimming pool environmental health checklist, safety of equipment and so on. Then, the risks were categorized and corrective revisions were proposed. Data were analyzed using SPSS version 19. Results: After data analysis, 41 types of safety hazard and 35 types of health risk (potential and existing) were identified. A total of 7 work units and 6 jobs in swimming pools were classified, and 52 types of health risk and 69 types of safety risk were identified, assessed, and classified. After providing corrective measures, according to the ALARP principle, unacceptable risks were eliminated and 64 risk were classified as acceptable. Conclusion: According to the results, most of the health risks were related to the

swimming pools area. So that health training course for swimmers and increasing health culture have an important role in controlling health risks. Changing the attitude of swimming pools managers and personnel towards health, safety and environment (HSE) issues also have an important role in controlling health and safety risks

### **کلمات کلیدی:**

Environmental health, HAZID, Swimming pools, Risk assessment, Equipment safety

### **لینک ثابت مقاله در پایگاه سیویلیکا:**

<https://civilica.com/doc/1137543>

