## Medical Surveillance Management

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**Abstract :** Working in the exploration and production of petroleum exposed workers to various health risks, including but not limited to physical and chemical risks. Although lots of barriers have been put in place, e.g., hazard monitoring in the workplace, appropriate training on health hazards, proper personal protective equipment (PPE), the health hazard may harm the workers if the barriers are not effectively implemented. To prove the effectiveness of these barriers, it is necessary to monitor exposure by putting in place the medical surveillance program via biological monitoring of chemical hazards and physical check-ups for physical hazards. Medical surveillance management is the systematic assessment and monitoring of employees exposed or potentially exposed to occupational hazards with the goal of reducing and ultimately preventing occupational illness and injury. The paper aims to demonstrate the effectiveness of medical surveillance management in mitigating health risks associated with physical and chemical hazards in the petroleum industry by focusing on implementing programs for biological monitoring and physical examinations, including defining procedures for biological monitoring, urine sample collection, physical examinations, and result management on offshore petroleum platforms. The implementation of medical surveillance management has proven effective in monitoring worker exposure to physical and chemical hazards, leading to reduced medical expenses and the risk associated with work-related diseases significantly.

Keywords: medical surveillance, petroleum industry, occupational hazards, medical surveillance process

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