Journal of Environmental and Occupational Health, 2022
VOL 12, NO. 10, PAGE 02

OPINION ARTICLE

Open Access

The Significance of Occupational Hazard and its Classifications

Walter Gilbert*
Department of Environmental Science, Harvard University, Cambridge, United Kingdom

ARTICLE HISTORY
Received: 10-Sep-2022, Manuscript No. JENVOH-22-81846; Editor assigned: 13-Sep-2022, PreQC No: JENVOH-22-81846 (PQ); Reviewed: 27-Sep-2022, QC No: JENVOH-22-81846; Revised: 05-Oct-2022, Manuscript No: JENVOH-22-81846 (R). Published: 12-Oct-2022

Description

A risk encountered at work is referred to as an occupational hazard. This includes a wide range of dangers, such as chemical dangers, biological dangers (biohazards), psychosocial dangers, and physical dangers. The National Institute for Occupational Safety and Health (NIOSH) in the USA conducts workplace investigations and research addressing workplace health and safety issues that result in guidelines. Occupational hazards are dangers that are connected to the employment environment on both a long-term and short-term basis. It is a subfield of public health and occupational safety and health research. Physical harm is a possible short-term risk, whereas occupational diseases including cancer and heart disease are possible long-term risks. In general, negative health impacts brought on by short-term hazards can be reversed, whereas those brought on by long-term dangers cannot.

Chemical hazards

A subcategory of occupational hazards called "chemical hazards" involves a range of chemicals. Chemical exposure at work can have negative short-term or long-term impacts on health. Hazardous chemicals can be categorized into a wide range of categories, such as neurotoxins, immunological agents, dermatologic agents, carcinogens, reproductive toxins, systemic toxins, asthmagens, pneumoconiotic agents, and sensitizers. To lessen or completely eliminate the adverse health consequences of exposure to particular chemicals, NIOSH establishes Recommended Exposure Limits (REL) as well as suggests preventative actions. In addition, NIOSH maintains a list of chemical risks organized by chemical name. These exposure limits take into account data showing that a specific level of chemical exposure is associated with one or more negative health impacts. For instance, workers who are exposed to the compounds contained in engine exhausts are more likely to develop heart disease. Damage to the liver and kidneys has been linked to exposure to carbon tetrachloride. Leukemia has been connected to exposure to benzene.

Biological hazards

Bacteria, fungus, viruses, microbes, and poisons are examples of biological agents that can cause biological risks. These biological agents may have a negative impact on a worker's health. An example of a biological risk that has a significant impact on a large number of workers is influenza. Toxins produced by insects, spiders, snakes, and other living things must come into contact with the worker physically. When there are insufficient resources to stop the spread of the disease, health care professionals are particularly at risk for exposure to new infectious diseases as well as blood-borne infections including HIV, hepatitis B, and hepatitis C. Veterinarians, among other veterinary health professionals, are susceptible to zoonotic disease exposure. If doing necropsies on infected birds or otherwise working with infected tissue, those who perform clinical work in the field or a lab run the danger of contracting the West Nile virus.

Psychosocial hazards

Any occupational risk connected to how work is planned, organized, and managed, as well as the social and economic surroundings of work, is referred to as a psychosocial risk or work stressor. They do not result from a physical substance, object, or dangerous energy, in contrast to the other three types of occupational hazards (chemical, biological, and physical).

Physical hazards

Repetitive motion is the act of doing a specific movement repeatedly over an extended period of time. This will wear out your muscles and eventually cause nerve damage. The soft tissues, including the nerves, muscles, and tendons, may be hurt as a result of this action. Tennis elbow, carpal tunnel syndrome, tendonitis, bursitis, and other names are given to some of these wounds. To ensure productivity, these actions require intervals be-

Contact: Walter Gilbert, E-mail: gilbert01@edu.tw

tween tasks to allow the nerve or muscles to recuperate.

Vibration hazards

When a worker uses equipment that vibrates as a sign of its operation, occupational vibration dangers most frequently happen. Hand Arm Vibration Syndrome (HAVS) is the most prevalent kind of vibration syndrome. Damage to the blood vessels, nerves, muscles, and joints of the hand, wrist, and arm may result from prolonged exposure to HAVS.

Noise

Twenty-two million workers in the US are exposed to noise levels every year that may be harmful to their health. In the manufacturing industry, occupational hearing loss is the most prevalent occupational ailment. When compared to other workers, those who work in very noisy environments such as musicians, miners, and even stock car racers are significantly more likely to develop hearing loss. Even while wearing the right hearing protection can frequently avoid irreversible noise induced hearing damage, it's still important to restrict how long people are exposed to loud noises. Because of the creation and execution of OSHA's Hearing Conservation Program (HCP), businesses are now required to better safeguard their employees against excessive noise levels. The HCP gives employees the ability to get noise protection equipment that is appropriate for the noise levels they are exposed to, as well as receive audiometric testing and noise exposure assessment.