

# A REVIEW OF HEALTH RISK ON CONSTRUCTION SITE

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**Abstract-** Nowadays, construction sector is recognized as a field of risks and is characterized to be very complex, dynamic, and unique where uncertainties things are arise from various sources[5]. The main objective of this paper was to review the health risk during construction of high rise building. The focus of the paper is to understand the health risks with respect to respiration, skin disease, muscular disorders, noise and stress. Further we studied health problem faced by women construction workers. Then finally some remedial measures are suggested to avoid or to minimize of health risk of workers on construction site

**Keywords:** **health risk, construction site, workers problem**

## 1. INTRODUCTION

The India construction sector employs more than 1 million people who have a high rate of occupational ill health because of the nature of their jobs. The effects of these illnesses on individuals and their families as there is often a long-term impact on workers life and financial security. The Health and Safety Executive reports that in 2009/10, 40 construction workers lost their lives, 3125 reported major injuries and 2.4million workers were lost through work related ill health. Aim of this occupational health should not only focus on providing health checks before someone starts work, they studied welfare, general information about health and safety, well-being and fitness to work, or managing sickness absence and return to work. Occupational health should also focus on how to reduce risks to workers' health.

## 2. RESEARCH OBJECTIVES

- 1 To review the health risk occurring on construction site.
- 2 The focus of the paper is to understand the health risks with respect to:

- A. Respiration
- B. Skin Disease
- C. Muscular Disorder
- D. Noise and Stress

### 1 .To review the health risk occurring on construction site :

On construction site various hazards and health risk problem were occurred which are unsafe for the workers who work on site.

In India, construction is the largest economic activity after agriculture and since it is a labor-intensive industry consist 44% of all urban unorganized workers. In this work force comprises 55% of unskilled labor, 27% skilled labor and rest the technical and support staff[2]. The two broad categories of construction works are building and civil engineering[2].In Building works involving structures such as houses, offices, shops, factories and schools. Civil engineering applies to all the other built structures in our environments, including roads, tunnels, canals, dams, railways and docks.[2] In both the sector causes greater risk to worker like developing certain health disorders and sickness than workers in many other industries. They are exposed to multiple physical, chemical and biological agents, which make them vulnerable to various health problems that include - injuries, respiratory problems, dermatitis, musculo-skeletal disorders and gastro-intestinal diseases[2,5]. The work is hard physical labor, often under difficult conditions like adverse weather conditions and the nature of work, hours of work, low pay, poor living conditions with lack of basic amenities and separation from family, lack of job security and lack of access to occupational health services make the situation worse[5] . Apart from this, in most of construction projects the workers employed are unorganized in nature and often not guided by the legislations made for the health and welfare of the workers and hence are not eligible for free or subsidized care.

In India they are mostly migrants from remote villages, often are less educated and not cautious about different preventive measures. Most of them are inter-state migrants and has poor language skills that prevent them from understanding the safety precautions given and to voice their problems[7]. Their health and safety are also neglected and accident and occupational disease statistics are not accurately available

### 2. The focus of the paper is to understand the health risks with respect to:

- A. Respiration
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### A. Respiration:

Work-related respiratory disease are caused or made worse by breathing in hazardous substances that damage the lungs. In the construction industry the most common of these diseases are chronic obstructive pulmonary disease (COPD), asthma and silicosis. To learn more about these diseases[12].

### B. Skin Disease:

In Various Occupational Diseases the 20-30 % Diseases are caused on construction site is Skin Diseases

Occupational skin diseases are skin diseases caused by hazards at work

Physical Hazards - Rubbing, Mechanical Pressure, Radiations And Temperature.

Biological Hazards- Range from Bacteria, Fungi, Viri, To Skin Parasites

The Most Common Cause of Skin Disease In The Workplace Is Exposure To Chemical Substances

### C. Muscular Disorder:

MSD refers to an injury that affects the muscles, joints, tendons or spinal discs. Such injuries are most likely to affect the back, shoulders and neck, and legs. Symptoms may include pain, aching, discomfort, numbness, tingling and swelling. Workers who suffer from MSDs may have pain or discomfort and a reduced ability to carry out tasks. Serious cases can result in permanent disability. An ache or discomfort, unless spotted and dealt with effectively, can turn into a long-term injury. For further information on MSD and its effects on health<sup>[12]</sup>.

### D. Noise and Stress

#### Noise -

Regular, frequent and continuous exposure to loud noise can permanently damage a person's hearing. Occasional or low-level exposure is unlikely to cause ill health. Noise can also create a safety risk if it makes it difficult for workers to communicate effectively or stops them hearing warning signals. Exposure to sudden, extremely loud noise can cause instant damage. Gradual hearing loss due to repeated exposure to noise is more common and it can take years for a worker to realise just how deaf they have become. Hearing loss can make it difficult to understand speech, but this is not the only problem. Some people develop tinnitus<sup>[7]</sup> (ringing, whistling, buzzing or humming in the ears) which is a distressing condition that can disturb sleep. For further information on noise and its effects on health<sup>[12]</sup>.

#### Stress -

HSE defines stress as 'an adverse reaction to excessive pressure'. Pressure is often part and parcel of work and

helps to keep people motivated. Excess, badly-managed exposure to pressure can lead to stress. Workers who experience stress, anxiety or depression are unlikely to perform effectively. This can be costly to employers and in safety-critical industries such as construction it can have serious consequences. The HSE gives the top five most stressful aspects of work in construction as: 1. having too much work to do in the time available; 2. travelling or commuting; 3. being responsible for the safety of others at work; 4. working long hours; and 5. having a dangerous job<sup>[12]</sup>.

### 3. DISCUSSION AND SUGGESTION:

1. When worker working at height safety awareness training is essential for employees required to work at height.
2. Noise is the major hazard occurred on construction site to minimize this employers are required to carry out and document a comprehensive noise risk assessment – and issue appropriate PPE.
3. Respiration Diseases causes when worker work on construction site to minimize this diseases it is necessary to worker to use safety equipment and regularly medical checkup is necessary
4. Constant training on the use of tools and equipment, proper use of safety items
5. Signs and notices should be provided on construction sites and should be located at strategic areas on site
6. Training programs should be provided regularly which should include how to handle tools, equipment and plants
7. Management must ensure safety policies are obeyed, plants machineries and equipments should be maintained regularly.
8. Medical test should be carried on employees for drug use, alcohol intake and other and future purposes.

### 4. CONCLUSION:

1. In this project we concluded that the workers is have face various health risk problem in construction sector.
2. Further study the review of the health risk occurring on construction site. Also understand the health risks with respect to the respiration, skin diseases, muscular disorder, noise and stress.
3. Suggesting some preventive measures regarding this health risk problem on construction site.

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