



# KINGDOM OF THAILAND

## The Evaluation of the Economic and Lost Caused by Work-related Eye Injury

### Abstract

The objectives of the study were

1. to evaluate the economic and lost caused by work-related eye injury at the worksite
2. to study worker behavior regarding safety protection the worksite in manufacturing plants
3. to study how injured workers live their lives in their actual society after the incident.

The study was an integrated use of quantitative and qualitative data. The retrospective research was conducted. The samples were classified into four groups

1. The workers
2. The workers' family member's and relatives
3. The workers
4. The employers

Questionnaire was used to collect data from 380 samplings. In-depth interviews with 20 informants were conducted. Percentage statistical analysis of 2quantitative data, and content analysis as categorization of qualitative data were used.

### The research findings were that

1. the workers who had eye injuries sustained at work where are less than 200 full-time workers, 46.5% of which were in bicycle manufacturing factories, still making manufacturing factories food can manufacturing factories and plastic manufacturing factories; 45.3% worked as general workers; 83.1% have worked 7 hours a day; 77.9% had trained on safety at work; 98.5% were trained by the factories' officers, while only 1.5% were trained by officials form the Labor Department

2. workers' work-related accidents-majority cases were eye injury struck by flying object (up to 65.10); chemicals 11.6% the period of time when incidents mostly were between 14.00 – 15.00 p.m. and 02.00 – 03.00 a.m. Parts of body injured were eyeball 41.9% ; retina 23.3%; other tissue around eye 78% laceration to eye lid 78.8% thermal burn 10.2%
3. Risky behavior in worksite it was found that 48.8% of workers got alcoholic drunk at work; 39.0% smoking; 83.3% took pain release medicine and energy drink when with machine, tool, or chemicals; loud noise was considered most annoyance (91.1%) Safety engineering. 53.5% was danger form running machines. Such incidents as short circuit, eye struck by flying object, or welding burn may occur. 51.7% was no such body protection as mark, glove, eye-glasses. The reasons were because the workers don't get used to it; it was inconvenient, annoying, and the workers expected no accident would happen.

### **Qualitative study revealed that**

1. the workers got direct lost. It resulted in health problems. They got hurt, lost of some parts, such as hand, finger, arm, or eye-sight. They workers may have some days away form work, or at worst lost their work. The effect on workers' family – The injury put more burdens to the workers' families; the family members have to look after the injured. The cases of the injure workers' death, it would affect their families' economy and minds.
2. Workers' indirect lost. Work-related injury caused less income. Employees sustained job-related eye injuries would be disabling because of temporary or permanent vision loss. Psychological effect-workers sustain job-related eye injuries would feel depressed and loss their self-confidence in doing their jobs and their daily activities. They may feel uncertainty about their lives and worried about their families' economy. The relationship between the injured workers and their family members became worse because of their asserting mental illness.

### **Recommendation**

Employers should consider the essential of safety in worksite. They should organize safety committee, continuously train workers on safety at work, and enforce safety rules and encourage work disciplines, especially during the afternoon work-period. The workers have to were eye protection during their work. The employers should encourage job rotation, and provide appropriate assistance for the injured workers, as well as giving them proper job beside social welfare. For the workers, they should be aware of safety at worksite, be caution and careful while working. The workers were suggested to wear eye protection.

---

**ASEAN OCCUPATIONAL SAFETY AND HEALTH NETWORK (ASEAN-OSHNET)**

Ministry of Labour, Thailand

Occupational Safety and Health Division  
Department of Labour Protection and Welfare  
Ministry of Labour, Thailand