

TECHNICIAN OCCUPATIONAL SAFETY AND HEALTH ACCIDENT PREVENTION PROGRAM AT PT TELKOM AKSES WITEL BANDUNG

Virgita Nur Fazriyah Aghinanda

Master of Management, Universitas Widyatama, Bandung, Indonesia

Corresponding author: virgita.fazriyah@widyatama.ac.id

Abstract

PT Telkom Akses Witel Bandung has an occupational safety and health program which is considered not running optimally. Based on field observations, the factors of work accidents are caused by work tools that do not function properly and fatigue due to work. So, it is necessary to evaluate and improve to improve it. The purpose of this study was to design a safety and health accident prevention program at PT Telkom Akses Witel Bandung. The research method used is a qualitative approach using data collection techniques in the form of interviews, observation, and document review. The result of this research is the technician's health readiness examination program. The resulting designs are in the form of a mechanism design, forms and guidelines for the implementation of the technician's health readiness check. Through this design, it is hoped that as an effort to prevent work accidents and provide guarantees for the safety and health of employees at PT Telkom Akses Witel Bandung.

Keywords: Occupational Health and Safety, inspection and prevention of work accidents.

Introduction

Occupational health and safety cannot be separated from one another; this is an effort to ensure the physical and spiritual well-being of humans, especially employees, to become more prosperous and balanced individuals. Occupational safety and health refers to the knowledge and ability to prevent accidents and occupational diseases in organizations or companies. A work accident is an unexpected event that has the potential to cause injury or damage. Work accidents can occur due to negligence from the company, workers or both parties. For workers, injuries resulting from work accidents can impact their personal lives. For the company, work accidents will affect both material and non-material assets. The importance of occupational safety and health lies in protecting, guaranteeing, and maintaining employees' safety rights while working optimally to improve welfare, productivity, and company income, thereby achieving the company's goals.

Table 1. PT. Telkom Akses Witel Bandung Employee Work Accident Report

NO	Incident/Accident	2017	2018	2019	2020	2021	2022	Total
1	Fatality (Fat)	1	0	0	0	0	0	1
2	Traffic Accident	5	3	5	2	5	1	21
3	Medical Treatment Case	5	4	2	1	3	0	15
4	Property / Material Damage	0	0	0	0	0	0	0
5	First Aid Case (FAC)	0	3	0	0	0	0	3
6	Near Miss Incident (NMI)	0	0	0	0	0	0	0
Total								40

Based on table 1, it can be explained that cases of work accidents from 2017 to 2022 are fluctuating, namely there are unstable conditions regarding the number of cases of work accidents at Telkom Akses Witel Bandung. There were 40 cases that occurred, 21 of which were work accidents due to traffic accidents, 15 work accidents

that required special handling, 3 work accidents that could be given first aid, and 1 case of a fatal work accident, which resulted in the death of one employee. Most work-related accidents are caused by a lack of focus and fatigue while working; damaged road conditions also contribute to accidents, leading to technicians losing control of the vehicles they use. This is not in line with the government's policy to eliminate work accidents. Therefore, researchers are interested in researching factors related to work accidents and prevention that have been running at PT Telkom Akses Witel Bandung.

Based on observations and interviews conducted, discrepancies remain with the 3E concept (Engineering, Education, and Enforcement). Specifically, the engineering concept still faces obstacles due to the absence of a reporting mechanism for damaged work tools. In addition to the idea of enforcement, there are currently no regulations governing the health checks of technicians. This health check is a step to find out whether the technician is healthy and fit to work. To overcome these problems, it is necessary to design a work readiness check for technicians as a means to prevent work-related accidents.

One of the functions of human resource management is maintenance, which includes employee welfare, as explained by Bangun (2012). One of the operational functions of human resource management is to maintain human resources. Retention means keeping employees in the organization as members with high loyalty. This activity is related to occupational safety and health. Occupational safety is to protect workers from injury due to work accidents. Maintenance is an activity to improve the physical, mental, and loyalty conditions of employees during work.

Humans instinctively need a sense of security and comfort. Therefore, humans want to be safe from all forms of threats. This sense of security can be fulfilled if people are safe from all forms of threats, whether physical, psychological or social. Therefore, the company must provide this sense of security to all employees. So that employees can then work and try to fulfill their physical needs in a truly safe manner.

It can be concluded that human resource management is a science that regulates activities starting from planning, managing the roles and relationships of human resources, to ensuring the implementation of the flow to achieve its goals efficiently and effectively, so as to achieve optimal results. In carrying out the management process, organizations or companies need to maintain well-designed human resources to meet the needs and provide a sense of security and comfort to employees.

The purpose of conducting a pre-employment medical examination is to ensure that employees who work are in good health and have good stamina, not suffering from infectious diseases. The benefits of a pre-employment health check are as follows:

- Basic information on physical abilities in accordance with job positions
- Assess fitness
- Recognize diseases early on
- Monitoring employee health

Many types of work accidents can occur during technicians' installation work. According to Bird & Germain (1990) there are three types of work accidents, namely:

1. Accident, which is an unwanted event that causes harm to both humans and property.
2. Incident, which is an undesirable event that has not caused losses.
3. Near miss, which is a near miss in other words this incident

Methods

In this study, researchers used a qualitative approach with a descriptive approach that used interviews, observations, questionnaires and data processing methods. The purpose of using descriptive qualitative research is to describe and explain the problem in more detail to be studied optimally. Qualitative research is an instrument and research results that produce words or statements that are in accordance with the actual problems and circumstances. The basis for using a descriptive qualitative research approach, because in research activities a direct visit to the location is needed to clearly observe the object of research related to the phenomena that occur at Telkom Akses Witel Bandung.

Results and Discussions

In the observation activities, it was found that in previous studies at Telkom Akses Witel Bandung, routine checking activities for individual employees had not been carried out in an effort to prevent work accidents.

The prevention measures implemented are primarily through direct socialization involving multiple parties, such as the police. The HSE unit offers several e-learning training sessions on occupational safety and health. However, there is no preventive effort in the form of regular employee condition checks carried out by PT Telkom Akses.

The results of interviews with 15 provisioning technicians and assurance technicians revealed that numerous work accidents still occurred but were not reported to the HSE unit. This is because they believe it is a common occurrence in the field. Some of the work accidents that occurred but were not reported were electric shocks on poles, falling on materials being carried, scratching hands or being hit by sharp objects. According to the interview with the HSE (Health, Safety, and Environment) unit, the cause of this accident was attributed to three factors. The first factor is due to unsafe acts, specifically the existence of unsafe and dangerous actions carried out by employees, such as improper driving, reckless driving on the road, and inadequate driving skills. The second factor is due to unsafe conditions, including factors from a hazardous environment, such as damaged road conditions, insufficient street lighting at night, and potholes. The last factor is personal factors due to physical and mental limitations that occur. One example is due to high stress factors, fatigue after work.

PT Telkom Akses is a company that operates in the field of telecommunications, with some of its work involving electronic devices. Employees are required to work carefully at all times, both in the office environment and outside. The office building has been designed with safety in mind to ensure a safe working environment for employees.

Based on Regulation of the Minister of Health of the Republic of Indonesia No. 65 of 2016 concerning Electromedical Service Standards. In relation to occupational safety and health, there is a classification of equipment maintenance, namely planned maintenance, inspection, or examination. Planned maintenance refers to activities that are carried out regularly on a scheduled basis. Inspection or examination as the implementation of planned maintenance to ensure that the work tools used are in good condition, safe and suitable for use. Factors causing work accidents other than fatigue are the use of work tools that are not in accordance with working conditions. Work tools are used as a means of work or equipment to help carry out work. The work tools used must be in good condition and function normally. If the condition of the work tool is damaged, it will hamper the work. The condition of work tools that are not functioning properly in addition to hindering work, can lead to potential work accidents.

There are obstacles in the occupational safety and health management program at PT Telkom Akses Witel Bandung. These obstacles become problems that occur, among others:

1. Work accidents that occur are dominated by traffic accidents. Work fatigue is a factor that often occurs, causing work accidents.
2. The occupational safety and health supervision program that has been running at PT Telkom Akses Witel Bandung is only in the form of checking the condition of work tools. The results of the inspection if a work tool is found to be in a damaged condition, it must be replaced immediately.
3. There has never been a routine inspection related to the health condition of the technicians.

In the research aspect of unsafe acts as an aspect that is the source of the problem to be resolved. Unsafe acts are conditions caused by unsafe actions taken by employees that can be monitored for improvement. Unsafe actions taken in the form of not being good at managing rest time properly. Rest time should be used to stop for a moment to do activities, but it is misused by using the time to play online games, chatting about something that is not important. Not being able to use the break time properly leads to fatigue or loss of focus while working.

Innovation in the implementation of work accident prevention programs

To overcome the problems in this study, the company needs to apply the 3E concept (Engineering, Education and Enforcement) as an approach to preventing work accidents. This research design focuses on technician health checks before starting work, the design of this health check serves as a basis used to determine whether the health condition of employees who will work is healthy, prime and fit to work.

Djojodibroto (2001) said that employee health checks are important because they can determine health status and detect disease early on, to monitor the course of the disease suffered, prevent the onset of infectious

diseases, and determine the possibility of diseases arising from the work performed. The results of this health check will be useful for the company as a monitoring tool for employee conditions. The main purpose of this readiness check is as a step to prevent work accidents at PT Telkom Akses Witel Bandung.

However, the supervision process of occupational safety and health education is considered not to have a significant effect. Because the delivery through print media or socialization is still often ignored by employees. Employees ignore this appeal because, there are no strict sanctions because of the nature of the socialization of invitations to maintain safety and health while working.

In designing supervision in addition to requiring instruments, a mechanism is needed to carry it out. In the implementation mechanism regarding pre-employment readiness supervision designed in the form of inspection standards, eligibility standards and inspection procedures.

1. Examination standards are requirements or criteria that must be met in conducting readiness examinations including:
 - a) Interview activities carried out related to identity, physical examination, intoxication examination.
 - b) Work equipment function test, body temperature check and blood pressure check.
2. Eligibility standards are requirements or criteria that must be met to determine the feasibility of the technician's health condition.

Table 2. PT. Health Eligibility Standards

Recommendation	Complaint	History of medication use	Blood Pressure	Work tools
Eligible	No complaints	Not taking any medication within the last 6 hours	Blood pressure 110-140/90 mmHg	Functions normally
Not Eligible	There are complaints that can interfere with concentration while working	Taking medications that have side effects within the past 6 hours	Blood pressure 160/>100 mmHg	Not functioning normally

There are 2 results of the eligibility standard recommendations from the health check activities. A decent recommendation eligible means that the technician is in good health, physically fit and ready to work. The not eligible recommendation results mean that the technician is not ready to work because he is not in good physical health and the blood pressure condition is above normal limits.

Evaluation of Accident Prevention Program Design

An evaluation of the occupational safety and health program's design was conducted using the interview method. In this study, a draft mechanism and form for checking work readiness have been submitted. Based on the results of interviews with several HSE unit employees and technicians, it can be concluded from the statements submitted that the design of this occupational health readiness check is considered appropriate for application at Telkom Akses Witel Bandung. This design can be used as a monitoring tool carried out by the company for employee health conditions, to prevent work accidents. Through this program, it is able to overcome problems related to supervision, as the occupational safety and health supervision that has been implemented so far has not been maximized and has not met the needs of employees.

The results of this work and health check become a recommendation on whether the technician is in a condition that is suitable for work. The work tool damage report form is a forum for collecting data which will later be used as evaluation material for immediate replacement of new work tools. Based on observations and interviews, the readiness of technicians to work is not only seen from the feasibility of work tools, there needs to be routine health checks carried out and reporting of damaged work tools. Technician health will affect the risk of work accidents at Telkom Akses, Bandung.

We can conclude that occupational safety and health are essential for all employees in the company. To ensure employee safety, companies must effectively supervise occupational safety and health to minimize the potential for work-related accidents. The mechanism for preventing occupational safety and health accidents for technicians at PT Telkom Akses Witel Bandung includes several prevention programs. The preventive mechanism related to occupational safety and health that has been running is in the form of a program to check the work tools used. This inspection is routinely carried out because if the work tools used are not suitable and in a damaged condition, it will hamper the company's operations and create the potential for work accidents. The purpose of this activity is to monitor work carried out in accordance with the company's operational standards, which have been established.

The results of this work and health check serve as a recommendation as to whether the technician is in a fit-to-work condition. This prevention program is designed to increase awareness among employees of the importance of maintaining safety and health while working, so as to prevent work accidents. Prevention of work accidents can be done by implementing activities to provide standardized and safe work tools, providing training education and ensuring that the entire series of work is carried out following the company's operational standards set by PT Telkom Akses Witel Bandung.

Considering that safety and health management supervision is so important to maintain, prevent and reduce the occurrence of work accidents and improve company quality. Planning for more in-depth socialization of safety and health to make it easier to implement. Companies must make strict rules and regulations and impose sanctions if there is a violation of the implementation of the work accident prevention program carried out by employees. So as to create a deterrent effect when committing a violation.

References

Book

- Agus Dharma, S. M. (2009). *Manajemen Prestasi Kerja*. Jakarta: Rajawali.
- Hasibuan, D. H. (2007). *Manajemen Sumber Daya Manusia*. Jakarta: PT Bumi Aksara.
- Heinrich, HW. (1959). *Industrial Prevention: A Safety Management Approach*. New York: McGraw-Hill Inc.
- Mondy, R. W., & Noe, R. (2010). *Human Resources Management, edisi 9*. New Jersey: Penerbit Prentice Hall.
- Ramli, S. (2014). *Sistem Manajemen Keselamatan dan Kesehatan Kerja*. Jakarta: Dian Rakyat.
- Sayuti, Abdul Jalaludin. (2013). *Manajemen Kantor Praktis*. Bandung: Alfabeta
- Sedarmayanti. (2011). *Tata Kerja dan Produktivitas Kerja*. Bandung: UD. Mandar.

Journal Articles

- Sujiyanto, S. (2017). Pengaruh Integritas Dan Loyalitas Pegawai. *Jimmu – Volume II- Nomor 2 – Agustus 2017*, 66.
- Alfidyani, Kirana Smarta., Lestantyo, Daru., & Ida Wahyuni. (2020). *Hubungan Pelatihan K3, Penggunaan Apd, Pemasangan Safety Sign, Dan Penerapan Sop Dengan Terjadinya Risiko Kecelakaan Kerja (Studi Pada Industri Garmen Kota Semarang)*. Jurnal Kesehatan Masyarakat, 8(4), 478-484.
- Savitri, Eva D. Y., Lestariningsih, Siti., & Mindhayani, Iva. (2021). *Analisis Keselamatan Dan Kesehatan Kerja (K3) Dengan Metode Hazard And Operability Study (HAZOP) (Studi Kasus : CV. Bina Karya Utama)*. Jurnal Rekayasa Industri (JRI), 3(1), 51-61.
- Crize, Alexander M., Malkin, Jennifer., Zello, Gordon A., Toxopeus, Ryan., Bigelow, Philip & Shubair, Mamdous. (2021). *Impact of electronic logging devices on fatigue and work environment in Canadian long-haul truck drivers*. Journal of Transport & Health.
- Damayanti, Ria. Nurlaela, Usman, Sarah. (2018). *Pengaruh Keselamatan dan Kesehatan Kerja Terhadap Kinerja Karyawan PT Pulau Lemon Manokwari*.
- Halder, Amitava., Nordin, Axel., Miller Michael., Kuklane, Kalev., Nirme Jens & Gao, Chuansi. 2021. *Effects of leg fatigue due to exhaustive stair climbing on gait biomechanics while walking up a 10° incline – Implications for evacuation and work safety*.
- Pettita, Laura. Probst, Tahira M., Barbaranelli, Claudio. Ghezzi, Valerio. (2016). *Disentangling the roles of safety climate and safety culture: Multi-level effects on the relationship between supervisor enforcement and safety compliance*.

Authors' Bibliography

Virgita Nur Fazriyah Aghinanda

Bandung, March 5, 1998

Virgita Nur Fazriyah is currently a graduate student at Widyatama University, majoring in management. Her research focuses on issues related to employee safety and health, particularly those affecting technicians in the telecommunications sector.