

The Effect of Work Situation and Unsafety Action on Work Accident in PT. Raja Marga Nagan Raya District

¹Susy Sriwahyuni, ¹Eka Santika, ¹Khairunnas Khairunnas, ¹Ishalyadi Ishalyadi, ¹Muhammad Iqbal Fahlevi

¹Faculty of Public Health, Universitas Teuku Umar, Aceh, Indonesia

Corresponding author: Susy Sriwahyuni, e-mail: susysriwahyuni@utu.ac.id

Co-author : SE: santika.eka@gmail.com, KK: khairunnas@utu.ac.id, II: ishalyadi@utu.ac.id, MIF: muhammadiqbalfahlevi@utu.ac.id

Submitted: 19/03/2020

Revised: 06/04/2020

Accepted: 19/04/2020

Published online: 21/04/2020

doi: <https://doi.org/10.35308/j-kesmas.v7i1.1916> **How to cite this article:** Sriwahyuni, S., Santika, E., Khairunnas, K., Ishalyadi, I., & Fahlevi, M.I. (2020). The effect of work situation and unsafety action on work accident in PT. Raja Marga Nagan Raya District. *J-Kesmas: Jurnal Fakultas Kesehatan Masyarakat (The Indonesian Journal of Public Health)*. 7(1): 34-37.

Abstract

A work accident is an unplanned event that has the potential to cause injury, damage or other loss to someone. Based on preliminary studies conducted by researchers to 10 employees that the work environment is less than the maximum one of which is caused by a workplace environment that is too hot, muddy, slippery and easily causes employees to slip. The aims of research to determine the factor of affecting work accident. The research used analytic survey with cross sectional approach. The population were all employees (72 respondents) and used total sampling and used chi-square test. The results showed there were effect among work situation (Pvalue = 0.011) and unsafety action (Pvalue = 0,000) with work accident. The researcher suggest to PT. Raja Marga to provide warning letters to employees in an effort to avoid work accidents to the maximum extent.

Keywords : work situation; unsafety actions; work accidents

Introduction

A work accident is unplanned event that has the potential to cause injury, damage or other loss to someone (Gunawan & Waluyo, 2015). Work accidents are generally caused by worker behavior (human factors) and working conditions (work environment factors) (Ramli, 2010). According to Setyawan (2015), cause of workplace accidents have two factors, namely dangerous behavior (unsafe action) as much as 80% and work conditions (unsafe condition) as much as 20%.

Unsafe actions are behaviors that can cause work accidents that result in injury losses to death (Deviani *et al.* 2015). Such actions as actions without lack and did not used personal protective equipment, qualifications and authority, or move work safety equipment (Djatkiko, 2016). Unsafe actions are motivated by age, lack of knowledge and experience, fatigue, stress (Daryanto, 2018). Unsafe working conditions are conditions caused by inappropriate machinery or equipment, poor working environment, inadequate facilities (Tarwaka, 2017). Work environment factors that cause work accidents are physical, chemical and biological factors (Triwibowo & Pusphandani, 2013).

Labor is important factor when the work process is taking place, there are often accidents in the workplace; minor accidents and serious accidents (Irzal, 2016). However, sometimes the accident is not reported or get a handler because it is considered not to reduce work productivity. Accidents also occur due to dangerous machine, vibration, noise, and materials that harm the lungs, physical injuries, eyes, skin and stress, limited workplaces, and falling on goods (Winarsunu & Tulus, 2010).

Raja Marga is a limited liability company engaged in the processing of palm oil into CPO (Crude Palm Oil), established in 2013 and located in Gampong Alue Rambot, Darul Makmur District, Nagan Raya Regency. PT. Raja Marga has 104 employees consisting of 7 office employees, 10 security employees, 7 laboratory employees, 13 sorting employees, 40 production employees, 2 electricians, 17 workshop parts and 8 staff oang (PT. Raja Marga, 2018)

Based on BPJS Ketenagakerjaan's data, the number of work accidents in Indonesia in 2018 was 157,313 cases (BPJS Ketenagakerjaan Indonesia, 2018). In Aceh province the number of work accidents in 2016 was 5 accidents, in 2017 there were

5 accidents, in 2018 there were 1 accidents (BPJS Ketenagakerjaan of Aceh, 2017). According to preliminary information from one of the employees of PT. Raja Marga there was 1 person who died in 2016. Then according to observations there are many sources of danger in PT Raja Marga that can cause work accidents, as well as the types of work that are classified as potentially causing work accidents potential for work accidents humans.

Based on preliminary studies conducted by researchers to 10 employees that the work environment is less than the maximum one of which is caused by a workplace environment that is too hot, muddy, slippery and easily causes employees to slip, and minimal equipment. Negligence of labor is also one of the causes of accidents, people where they don't get enough rest, fatigue for those who work at night, less attention is obtained by workers, then

unsafe actions sometimes do not follow the existing work methods to quickly finish their work, do not use protective equipment self and various circumstances that make employees have work accidents. The aims of research to determine the factor of affecting work accident.

Materials and Methods

This research is a quantitative study uses analytic surveys with cross sectional survey study design that purpose to determine the factor of affecting work accident in PT. Raja Marga Nagan Raya Regency. This research was conducted on June to July, 2019. The population was all employees of PT. Raja Marga as many as 72 respondents with sampling technique uses total sampling.

Results

The effect of work situation with work accident

Table 1. The effecting of work situation with work accident

Work Situation	Work Accident				Total		P _{Value}	PR
	There is		There no		f	%		
	n	%	n	%				
Safety	12	36.4	21	63.6	33	100	0.011	0.254
Unsafety	27	69.2	12	30.8	39	100		

Based on Table 1 shows that of the 33 respondents whose working situation were safe as many as 21 respondents (63.6%) did not experience work accidents. While of the 39 respondents whose work situation were unsafety as many as 27 respondents (69.2%) had work accidents.

There was a significant effect between work situation with work accidents with the $P_{value} = 0.011$. The Prevalence Ratio (PR) is 0.254. Concluded that respondents with unsafety work situation will have 0.254 times the chance to experience work accident compared to respondent who have safety work situation.

The effect of unsafety actions with work accident

Table 2. The effect of unsafety actions with work accident

Unsafety Action	Work Accident				Total		P _{Value}	PR
	There is		There no		f	%		
	n	%	n	%				
Dangerous	36	87.8	5	12.2	41	100	0.000	67.2
Not Dangerous	3	9.7	28	90.3	31	100		

Based on Table 2 shows of 41 respondents who were unsafety actions (unsafety actions) were 36 respondents (87.8%) who experienced work accidents. While of the 31 respondents who were not dangerous unsafety actions (unsafety action) were 28

respondents (90.3%) who did not experience work accidents.

There was a significant effect between unsafety actions with work accident Baswith $P_{value} = 0.000$. The Prevalence Ratio (PR) value = 67.2 it can be concluded that respondent who are dangerous

unsafety actions will have as much as 67.2 times the chance to experience work accidents compared the respondents who not dangerous unsafety actions.

Discussion

The effect of work situation with work accident

The result above linier with Primadianto *et al.* (2018), this study indicate the effect of unsafe conditions on workplace accidents of 1.116, which means that people who are often in unsafe working conditions have a 1.116 times higher risk of having work accidents. Unsafe workplace conditions are one of the causes of workplace accidents (Zhou *et al.*, 2015)

Respondents whose work in unsafe situation and have work accidents due to insufficient lighting because they are indoors, feel uncomfortable about the temperature at work let alone in a hot room, noise that interferes with workplace activity, air pollution, workplaces are not Available signs of work hazard. While respondents who work conditions are safe and do not experience work accidents due to insufficient lighting because they are in an open space, and feel comfortable when working.

The working conditions at PT. Raja Marga Nagan Raya regency is still not well controlled, where there are those who do not wear PPE when working such as sandals, work clothes as protective because the workplace is too hot and the floor is slippery, causing work accidents.

The effect of unsafety actions with work accident

The results above linier with research Affidah and Sari (2016) where the results of this study indicate that there is an influence between unsafe actions on workplace accidents. A similar study conducted by Hidayat and Hijuzaman (2014) showed that unsafe behavior (Unsafe Act) had a positive and significant effect on workplace accidents. Other research conducted by Panjaitan and Silalahi (2019) that there is an influence between unsafe actions against accidents on construction workers. The use of Personal Protective Equipment when working affects the occurrence of work accidents (Anggraini, 2011). The use of PPE that is complete can minimize the incidence of workplace accidents (Fairyo and Wahyuningsih, 2018).

Respondents who have unsafe actions and work accidents due to respondents did not followed

the established work method, taking shortcuts that were not according to available standards, had an accident due to incomplete PPE, errors in using PPE. While respondents who didn't experience unsafe actions and work accidents because respondents followed the work methods that have been determined, use equipment and use PPE in the right way.

The working conditions that occur at PT. Raja Marga Nagan Raya Regency unsafe actions (unsafe actions) sometimes do not follow applicable regulations, resulting in work accidents.

Conclusion

1. The effect of working situation on work accident in PT. Raja Marga Nagan Raya Regency on value (Pvalue = 0.011 $< \alpha = 0.05$).
2. The effect of unsafety actions on work accident in PT. Raja Marga Nagan Raya Regency on value (Pvalue = 0,000 $< \alpha = 0.05$).

Acknowledgement

Thanks for the Head of the PT. Raja Marga Nagan Raya District.

Author Contribution and Competing Interest

All of the authors contributed in collecting and analyzing the data, including preparing the manuscript. The author assures that there is no conflict of interests in the activities and preparation of this report.

Publisher's Note

J-Kesmas: Jurnal Fakultas Kesehatan Masyarakat (Indonesia Journal of Public Health) remains neutral with regard to jurisdictional claims in published institutional affiliation.

References

- Affidah, A.N., & Sari, V.D.P. (2016) Pengaruh motivasi dan tindakan tidak aman terhadap kecelakaan kerja pada karyawan bagian produksi dalam masa giling shift 3 PG X Kediri. *J. Wiyata*, 3(2): 106-112.
- Anggraini, R. T. (2011) *Pengaruh pemakaian apd terhadap kejadian kecelakaan kerja pada perajin batu marmmer di Desa*



- Gamping Kabupaten Tulungagung*. Retrieved from <https://media.neliti.com/media/publications/236497-pengaruh-pemakaian-APD-terhadap-kejadian-ed1f6952.pdf>
- BPJS Ketenagakerjaan Aceh (2017) *Jumlah kecelakaan kerja*. Aceh.
- BPJS Ketenagakerjaan Indonesia (2018) *Data kecelakaan kerja di Indonesia*. Jakarta.
- Daryanto, S. (2018) *Pedoman praktis K3LH keselamatan dan kesehatan kerja dan lingkungan hidup*. Yogyakarta: Gava Media.
- Deviani, D.A., Ardyanto, Y.D., & Basuki, N.B. (2015) Analysis of individual factors with unsafe action toward the production workers of a chemical industry in Gresik Indonesia. *Internat. J. Technol. Enchanc. Emerging Engin. Res.*, 3(05): 21–24.
- Djarmiko. (2016) *Keselamatan dan kesehatan kerja*. Yogyakarta: Deepublish.
- Fairyo, L. S., & Wahyuningsih, A. S. (2018) Kepatuhan pemakaian alat pelindung diri pada pekerja proyek. *Higeia J. Pub. Health Res. Develop.*, 2(1): 80–90.
- Gunawan., & Waluyo (2015) *Risk based behavioral safety membangun kebersamaan untuk mewujudkan keunggulan operasi*. Jakarta: PT Gramedia Pustaka Utama.
- Hidayat, D.R., & Hijuzaman, O. (2014) Pengaruh perilaku tidak aman (unsafe action) dan kondisi tidak aman (unsafe condition) terhadap kecelakaan kerja karyawan di lingkungan PT. Freyabadi Indotama. *J. Teknologika*, 4(2): 15–24.
- Irzal (2016) *Dasar-dasar kesehatan dan keselamatan kerja*. Jakarta: Kencana.
- Panjaitan, S.S.U., & Silalahi, M.I. (2019) Pengaruh unsafe action terhadap kecelakaan kerja pada pekerja konstruksi di PT . DAP Perumahan Citra Land Bagya City Kota Medan. *J. Prima Medika Sains*, 1(1): 1–6.
- Primadianto, D., Putri, S.K., & Alifen, R.S. (2018) Pengaruh tindakan tidak aman (unsafe act) dan kondisi tidak aman (unsafe condition) terhadap kecelakaan kerja konstruksi. *J. Dimensi Pratama Teknik Sipil*, 7(1): 77-84.
- PT. Raja Marga (2018) *Data PT. Raja Marga Kabupaten Nagan Raya*. Nagan Raya.
- Ramli, S. (2010) *Sistem manajemen kesehatan & keselamatan kerja OHSAS 18001*. Jakarta: Dian Rakyat.
- Setyawan (2015) Kecelakaan kerja di jalan pada karyawan. *J. Kesehatan Masyarakat Undip*, 43(2): 32–33.
- Tarwaka (2017) *Keselamatan dan kesehatan kerja manajemen dan implikasi K3 di tempat kerja*. Surakarta: Harapan Press.
- Triwibowo & Pusphandani (2013) *Kesehatan lingkungan dan K3*. Yogyakarta: Nuha Medika.
- Winarsunu & Tulus (2010) *Psikologi keselamatan kerja*. Malang: UMM Press.
- Zhou, Z., Goh, Y.M., & Li, Q. (2015) Overview and analysis of safety management studies in the construction industry. *Safety Sci.*, 72: 337-350.
