

## IDENTIFICATION OF FIT TO WORK PROGRAM FOR AMBULANCE DRIVERS AT X HOSPITAL, NORTH SURABAYA

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### Abstract

Jobs that are vulnerable to work accidents include working as ambulance drivers in hospitals, one of their duties is drive an ambulance at high speed in emergency situations. Implementation of the Occupational Safety and Health program is very important to increase worker productivity, reduce work accidents, especially among ambulance drivers. There is an occupational health and safety program at Hospital X Surabaya, namely Fit to Work. Fit to work program is carried out to determine the health condition of workers so that they are able to work without causing unsafe actions that result in work accidents. Purpose this study to learn and identify the process of fit to work program for ambulance drivers at Hospital X, North Surabaya. Research is a quantitative research with descriptive data analysis. Results in study are that ambulance drivers carry out a fit to work by checking vital signs before carrying out their work and determining their fit condition by competent health workers. Fit to work was successfully appreciated by ambulance drivers as a preventive measure to avoid work accidents, considering the risk of danger for ambulance drivers is high, such as danger originating from within the driver and external (drowsy, sick, heavy traffic etc).

**Keyword:** Fit to Work, Ambulance Driver, Accidents

### Introduction

An ambulance driver is an officer who is responsible for operating an ambulance and supporting emergency services. Ambulance mode of transportation is a vehicle that is designed differently for transporting or delivering patients with emergency conditions to the nearest health service, ambulance operations are required to activate the siren as a sign to other vehicles to immediately pull over due to traffic congestion and high speeds above the maximum limit which have a high potential for accidents (1). Work accident is an unwanted incident or event that will harm workers and result in losses in the work process (2). There is a prevalence of traffic accidents in Taiwan of 1,627,217 cases with 715 ambulance accidents causing 8 deaths and 1,844 injured patients in 24 hours (3). In Indonesia, ambulance accidents often occur, a traffic accident involving an ambulance occurred in the Batang KM 353 Batang-Semarang toll road area with 1 person dying (4)

Domino theory of work accidents confirms that work accidents are caused by lack of supervision, basic cause, direct cause resulting in accidents and losses. Three main causes of work accidents are the work environment, humans or workers and machines or tools (5). One of the important factors in humans is health conditions. Higher of health factor, the lower the work accident factor in workers. Occupational Safety and Health is important in improving social security and the welfare of workers, and has a positive impact on the sustainability of workers' work productivity. According to the Regulation of the Minister of Health No. 66 of 2016 concerning Occupational Safety and Health Hospitals, all activities to guarantee and protect the safety and health of hospital human resources, patients, patient companions, visitors, and the hospital environment through efforts to prevent work accidents and occupational diseases in hospitals (6)

One of the implementations of Hospital Occupational Safety and Health in reducing work accidents by ambulance drivers is the implementation of fit to work. According to Palmer (2007) in Rohmah, S (2019) Fit to work is the result of an evaluation of each worker's ability to work well and reduce risks to their health and safety at work (7). Fit to work is an occupational health effort in the form of diagnostic activities, clinical treatment that focuses on improving health levels and work ability as well as preventing disease in the workplace. Fit to work is an occupational health program that is carried out to determine the health condition of workers so that they are able to work without causing unsafe actions that result in work accidents. Fit to work is very important to know the condition of workers who are fit to the risks faced in the workplace. Through fit to work activities, it will be known whether workers are fit or unfit and at risk for their work (8). Implementation of the fit to work program for ambulance drivers at Hospital X was implemented due to lesson learning by the Health Safety Secure Environment Unit, namely efforts to prevent sentinel incidents and medical treatment cases considering the high risk of ambulance drivers' work.

## Method

This research is a quantitative research with descriptive data analysis. Data collection was carried out using observation methods and also interviews with respondents totaling 6 ambulance drivers. Research was conducted in July 2024. This research was conducted at one of the X Hospitals in the North Surabaya area. Data presentation is processed in the form of narratives, tables and images.

## Results

### 1. Respondent Characteristics

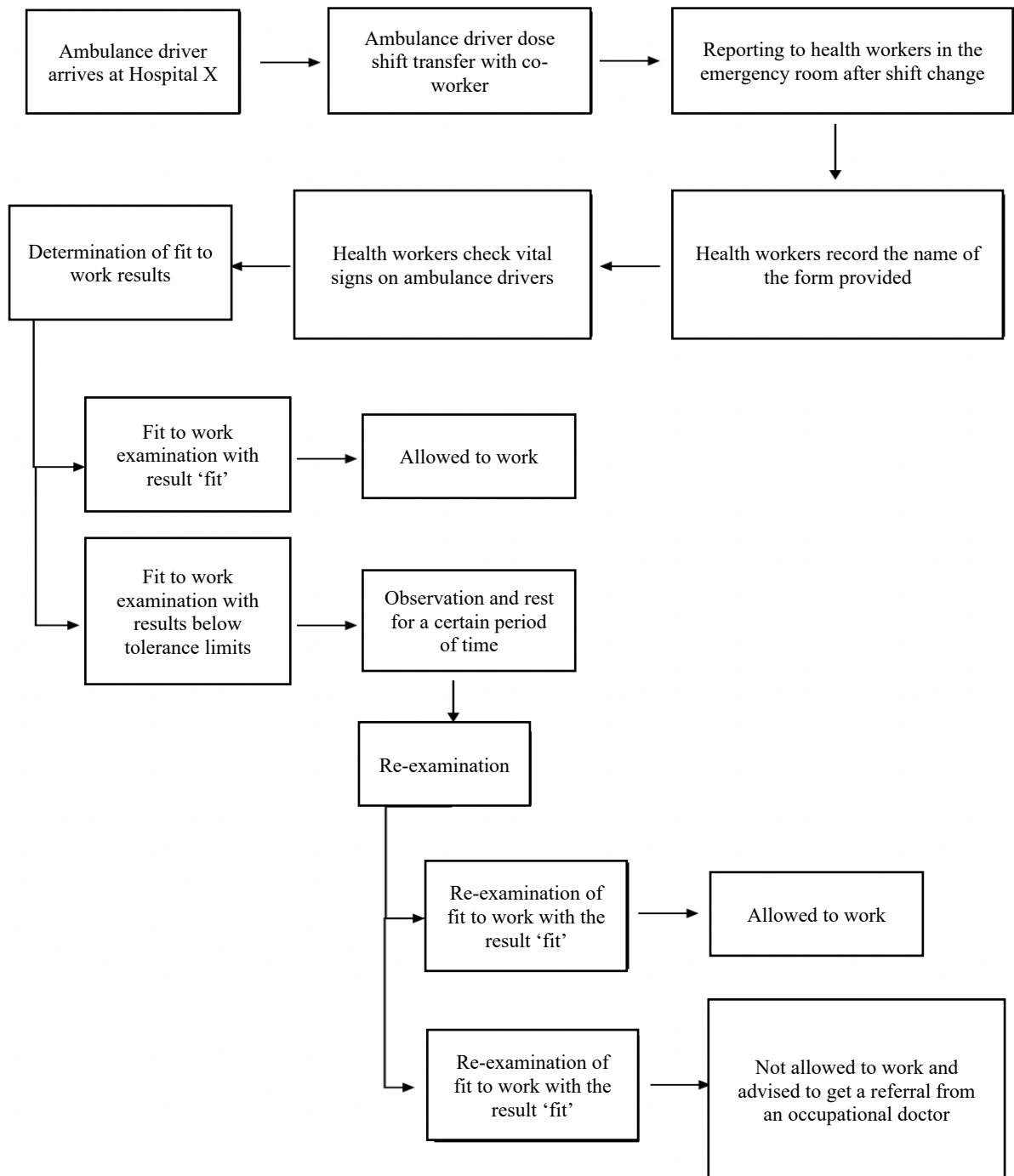
The results of the characteristics of respondents in ambulance drivers can be seen in table 1 below:

<b>Table 1 Distribution of Characteristics of Ambulance Driver Respondents</b>		
<b>Characteristics</b>	<b>frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	6	100%
Female	0	0
<b>Age</b>		
25 - 35 years old	1	16,6%
36 – 45 years old	3	50%
46 – 55 years old	1	16,6%
>55 years old	1	16,6%
<b>Education</b>		
Senior high school	6	100%
<b>Work Period</b>		
1 – 10 years	1	16,6%
11 – 20 years	3	50%
21 – 30 years	2	33,3%

Based on table 1, the results show that all workers are male with a total of 6 people with the last education being high school. there are 3 people who have an age range of 36-45 years. and there are 3 people with a work period of 10 years.

## 2. Vital Sign Examination Flow for Fit to Work Program

The following is the flow of the vital sign examination for the fit to work program to ambulance drivers at Hospital X.



**Figure 1. Vital Sign Examination Flow for Fit to Work Program**

## 3. Vital Sign Examination Fit to Work Program

The results of the vital sign examination of the fit to work implementation program are adjusted to existing standards. The results of the vital sign examination will be grouped into two, namely Fit and Unfit. The standards for vital sign examination according to (Sapra et al, 2023) are as follows (9):

Table 2 Vital Sign Examination Standards for Fit to Work Program			
Type of examination	Standard	Category	Examination Tool
Blood Pressure	<b>Sistolik dan Diastolik</b> < 120 dan <80 mmHg	Normal	Sphygmomanometer
	120-139 dan 80 – 89 mmHg	Prehypertension	
	140 – 159 dan 90 – 99 mmHg	Hypertension stage 1	
	>= 160 dan >=100mmHg	Hypertension stage 2	
Heart Rate	60 – 100 x/menit	Normal	Pulse oximetry
	> 100 x/menit	Tachycardia	
	< 60 x/menit	Bradycardia	
Respirasi Rate	12 – 20 x/menit	Normal	Watch
	>20 x/menit	Takipnea	
	<12 x/menit	Bradipnea	
Body Temperature	36,5 – 37,5 derajat celcius	Normal	Termometer
Oxygen saturation	95 – 100%	Normal	Pulse oximetry

#### 4. Results of Vital Sign Examination of Fit to Work Program for Ambulance Drivers at Hospital X

Vital sign checks for several weeks since the start of the fit to work program in several weeks in July 2024, are as follows:

**Table 3 Results of Vital Sign Examination of Fit to Work Program for Ambulance Drivers at Hospital X**

Type of examination	Total	Result	Percentage (%)
Blood Pressure	7 Times	Hypertension stage 1	22,5%
	10 Times	Prehypertension	32,2%
	14 Times		45%
		Normal	
Heart Rate	3 Times	Tachycardia	9,6%
	28 Times	Normal	90,3%
Respirasi Rate	31 Times	Normal	100%
Body Temperature	31 Times	Normal	100%
Oxygen saturation	31 Times	Normal	100%

Based on table 3, during the fit to work program carried out by ambulance drivers for several weeks in July, it was found that the results of vital sign examinations showed that 14 ambulance drivers had normal blood pressure, 28 normal pulse examinations, 31 normal breathing examinations, body temperature and oxygen saturation.

## Discussion

Regulation of the Minister of Manpower and Transmigration No. Per.02/MEN/1980 concerning Health Examination of Workers in the Implementation of Work Safety states, the health examinations that must be given to workers are divided into 3 types, namely pre-employment health checks, periodic health checks and special health checks. Identification of fit to work examinations on ambulance drivers is carried out to determine whether prospective workers are fit to work before working in order to obtain healthy workers according to the required health level. Occupational health services are required to carry out their main tasks in a comprehensive and integrated manner, which includes prevention, health promotion, curative and rehabilitative efforts. Implementing fit to work is a preventive effort to improve occupational safety and health (10)

Fit to work program process, namely the vital sign examination of ambulance drivers at Hospital X, is in accordance with one of the examinations contained in the manual entitled “Driver Fitness for Work: Awareness Package” that the fit to work examination method consists of face-to-face discussions, observations of work performance, health checks, drug and alcohol tests (11). Where basic health examination, one of which is a vital sign check. Vital sign examination is an objective measurement and clinical evaluation of a person's physiological function, where the level of vital sign abnormalities can predict long-term health outcomes. However, in the fit to work program that has been implemented by Hospital X for ambulance drivers, there is no standard operating procedure or guideline. Standard operating procedure (SOP) is a reference for workers, containing standard procedures used to ensure that company activities are carried out in accordance with company goals and can minimize errors (12).

Vital sign function examinations are carried out to detect whether someone is in a healthy condition or not and are carried out by competent health workers. If the fit to work examination has been carried out and the results are within the tolerance limits, the ambulance driver will be declared ‘fit’ and can work productively to reduce the occurrence of work accidents when driving an ambulance. Temporary unfit inspection results are obtained if the driver does not meet one of the established tolerance limits. If the ambulance driver during the fit to work examination gets a temporary unfit result, then the next action or treatment that is carried out is a recommendation to rest for a while while still being observed by the health workers on duty at the Emergency Room of Hospital X. In a series of fit to work examinations, if the driver does not meet the tolerance limits from the results of the vital sign examination even though action or treatment has been carried out in the form of observation and recommendations for rest, then the driver will be declared unfit with the decision that he will not be allowed to work, if necessary the driver will be referred to an occupational specialist for further examination to determine the cause of the driver's unfitness.

## Conclusion

Based on the vital sign examination in the fit to work program for ambulance drivers, the results of blood pressure examinations were obtained with the hypertension stage 1 category as many as 7 examinations, blood pressure examinations with the prehypertension category as many as 10 examinations and normal blood pressure results with 14 examinations. A total of 3 heart rate checks resulted in tachycardia and 27 checks resulted in normal heart rate. Respiratory rate and oxygen saturation examinations showed normal results. Ambulance drivers appreciate the fit to work program as a preventive measure to avoid work accidents. considering the risk of danger for ambulance drivers is very high, such as dangers originating from within the driver (drowsiness, illness, etc.) as well as dangers from external sources (heavy traffic, etc.). The suggestions we can provide are the creation of Fit to Work Guidelines, Decrees by Top Management and Standard Operating Procedures for the fit to work program.

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