

Pandemic Covid-19 Preparednes Plan in the Workplace: a Case Study in Mining Company

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ABSTRACT

COVID-19 Pandemic preparedness plans in mining companies are very important, so standards are needed as valuable input for all mining companies to make continuous improvements. preparedness plans, so that mining companies do not have to stop operating due to the impact of the COVID-19 pandemic. This study aims for a COVID-19 pandemic preparedness plan in mining companies. The methodology used in this study was to compare mining companies' COVID-19 preparedness plans with ISO/PAS 45005:2020 Standard General guidelines for working safely during the COVID-19 pandemic. The results The results suggest several elements for COVID-19 pandemic preparedness including leadership, risk management, case management, health protocols, 3Ts (tracing, testing and treatment), emergency management, and case investigations have been identified as key elements for inclusion. The scoring system can be based on the level of implementation of each element. In conclusion, to be better prepared for future pandemics, several strategies have been identified to better manage the pandemic including worker and community participation, worker and public led crisis communication and the RCCE strategy.

Keywords: COVID-19 in the workplace, COVID-19 pandemic preparedness, COVID-19 pandemic preparedness plan, COVID-19 pandemic preparedness index

INTRODUCTION

The COVID-19 pandemic has put enormous pressure and impact on the world, including Indonesia. This impact has a significant effect on both the health and non-health sectors. From the handling of the COVID-19 pandemic in Indonesia and in the world, there is a valuable lesson that Indonesia must continue to improve in various fields of development and an early response to a pandemic determines success in controlling it.

COVID-19 can be categorized as an emerging and re-emerging infectious disease that can become an outbreak (Peter Sands, 2016). An epidemic if not properly controlled can develop into an endemic, then develop into an epidemic and can become a pandemic. A pandemic is an epidemic of disease, widespread throughout the world and out of control (Greenwood, 1934). A pandemic is the worldwide spread of a new disease (WHO, 2010).

On 31 December 2019, World Health Organization (WHO) was alerted to a cluster of pneumonia patients in Wuhan City, Hubei Province of China. One week later, on 7 January 2020, Chinese authorities confirmed that they had identified a novel (new) coronavirus as the cause of the pneumonia. The propose interim name of the virus is 2019-nCoV also known as COVID-19 (WHO, 2020). The World Health Organization (WHO) declare COVID-19 as a pandemic on 11 March 2020, pointing to the over 118,000 cases of coronavirus illness in over 110 countries and territories around the world and the sustained risk of further global spread (Ducharme, 2020).

Since then, COVID-19 cases have continued to increase worldwide. As of March 6, 2021, the number of confirmed cases has reached 115,478,709 cases, including 2,568,720 deaths (WHO, 2021). Indonesia is also not free from COVID-19, with reports of the emergence of the disease starting February 2020, disease transmission continues to occur. On 5 March 2021 in Indonesia 1,368,069 (bnpb-inacovid19), while specifically for mining workers in Indonesia, the total number of confirmed COVID-19 workers was 9,538 mining workers in Indonesia as of 15 Jan 2021 (Dr. Lana Saria, 2021).

Every mining company that has implemented the SMKP/ MSMS (Mining Safety Management System) will have an Emergency Preparedness Plan, as part of that mining companies will certainly develop a Pandemic Preparedness Plan during the COVID-19 Pandemic with the aim of being able to tackle / reduce the spread of COVID-19 in the location of company and minimize impact (disability limitation) and recovery program. However, whether the Pandemic Preparedness Plan is reliable enough and the goal of making the Pandemic Preparedness is achieved, a standard score index is needed as a minimum guide to be applied by all mining companies in Indonesia so that a mining company does not cease operations due to the impact of the COVID-19 pandemic.

Epidemiological evidence shows that 2019-nCoV can be transmitted from one individual to another. During previous outbreaks due to other coronaviruses, including Middle East respiratory syndrome coronavirus (MERS-CoV) and the severe acute respiratory syndrome coronavirus (SARS-CoV), human-to-human transmission most commonly occurred through droplets, personal contact, and contaminated objects (fomites). The modes of transmission of 2019-nCoV are likely to be similar (WHO, 2020).

The COVID-19 pandemic is currently still ongoing throughout the world, and has a very large global impact, so that every country and company must jointly make efforts to control to prevent the spread and handling of COVID-19. Thus, this study aimed to assess a Mining company Pandemic Preparedness Plan Score.

METHOD

This study used a quantitative descriptive method by assessing the compliance of mining companies' pandemic preparedness plans and compared it to a checklist developed from ISO/PAS 45005:2020. According to Sudjana and Ibrahim (2004) descriptive research is "research that seeks to describe a symptom, event, event that is happening at the present time". Sugiyono (2012) explains that descriptive research is research conducted to determine the value of an independent variable, either one variable or more (independent) without making comparisons, or connecting with other variables. For the quantitative approach explained by Arikunto (2013) that the approach uses quantitative because it uses numbers, starting from data collection, interpretation of the data, and the appearance of the results

Data processing was carried out using a computer and the data obtained was processed by calculating the answers from each aspect of the checklist. Three (3) categories are used to describe the condition of the company: Score 0: There are no policies, procedures, implementation or documentation; Score 0.5: There are no policies and procedures but there is evidence of implementation and documentation or there are policies and procedures but no evidence of implementation and documentation; Score 1: There are policies, procedures, evidence of implementation and documentation. Assessment of the implementation is calculated using the

equation: $\text{total implementation value (\%)} = (\text{value aspects that are implemented} \times 100) / (\text{implemented aspects} + \text{aspects that are not implemented})$

RESULT AND DISCUSSION

Results

Based on the assessment carried out, the results obtained are assessing compliance with the mining company's pandemic preparedness plan and comparing it with the checklist developed from ISO/PAS 45005:2020:

Table 1.

The results obtained are assessing compliance with the mining company's pandemic preparedness plan and comparing it with the checklist developed from ISO/PAS 45005:2020

Number	Clause	The available value	the value obtained
4.7	Emergency preparedness and response	7.0	6.0
	The organization should be prepared for predictable emergencies and assess and revise existing processes if necessary. The organization should consider the following:		
	a. Emergency processes (e.g., guidance on evaluating within teams to limit close contact with others, adapting how workers and other interested parties where to congregate to increase physical distancing between teams).		1.0
	b. Review personal emergency evacuation plans for persons with a need to be assisted or facilitated during evacuation (including provision of additional PPE if treated).		1.0
	c. Train additional people to respond in an emergency, in the event of illness, self-isolation or quarantine resulting in a shortage of trained workers in the workplace.		1.0
	d. Provide first aid workers with personal first aid resources, including appropriate PPE, in the		1.0

event of a medical emergency or accident	0.0
e. Provide clear guidance on the process for dealing with an aggressive or violent person.	
Organizations should also change contingency plans to reduce the risk of transmission of the Covid 19 virus in emergency situations, to the extent reasonably practicable.	1.0
Organizations should require workers who provide assistance to others in emergency situations to take additional hygiene measures immediately after an emergency, including washing hands or using a hand sanitizer.	1.0
sub-Total	6.0

Discussion

Pandemic preparedness is a continuous process of planning, exercising, revising and translating into action national and sub-national pandemic preparedness and response plans. A pandemic plan is thus a living document which is reviewed regularly and revised, if necessary, for example based on the lessons learnt from outbreaks or a pandemic, or from a simulation exercise (WHO - Region of Europe, 2021).

In line with such a flexible approach to pandemic planning and response at the national level, WHO guidance presents 4 global pandemic phases (revised in 2009), which describe how an influenza pandemic may emerge and spread and are not linked to actions to be taken at the national or subnational level (a) interpandemic phase (the period between influenza pandemics); (b) alert phase (when influenza caused by a new subtype has been identified in humans); (c) pandemic phase (the period of global spread of human influenza caused by a new subtype); and (d) transition phase (when the global risk reduces and reduction in response activities may be appropriate). The phase is determined by ongoing global risk assessment, based on virological, epidemiological and clinical data for new influenza subtypes. The world is currently in an alert phase because of the avian influenza A(H5N1) (WHO - Region of Europe, 2021).

Labour or workers are human resources who have a big role in a national development which is the main key in national development to achieve general welfare and a better quality of life than before. Labour determines the success of a company, one of which is mining (BPS, 2020). Therefore, the quality and development of a mining company is greatly influenced by the quality of the workforce within it. In other words, an unqualified workforce can possibly hinder the development of the mining company, so that every worker will feel that he or she is required to have adequate capabilities and improve the quality of their work so as not to be eliminated from the mining company. However, the existence of the Covid-19 Pandemic has had a major impact

on the quality of the workforce so that companies are no longer productive in producing goods and services. The increasing number of patients exposed to Covid-19 has resulted in the Indonesian government issuing various policies in dealing with Covid-19.

The organization should be prepared for predictable emergencies and assess and revise existing processes if necessary. The organization should consider such as emergency processes (e.g., guidance on evaluating within teams to limit close contact with others, adapting how workers and other interested parties where to congregate to increase physical distancing between teams). Several efforts to reduce the anxiety of contracting the virus for workers include requiring the use of masks, providing a place to wash hands, and implementing social distancing in the work environment. For workers who carry out social distancing, they can overcome anxiety levels and stress levels through positive activities such as exercising. In addition to the health benefits obtained from exercise, including improving mood and providing a relaxing effect and reducing stress levels due to work (Nafwal, 2021).

The organization also should consider about review personal emergency evacuation plans for persons with a need to be assisted or facilitated during evacuation (including provision of additional PPE if treated). The disaster threat preparedness plan during the Covid-19 pandemic is like evaluating hospitals that treat Covid-19 patients to reflect natural disasters. If you pay attention, the hospital should consider referring Covid-19 patients to another referral hospital that is closer to them (Bnpb, 2021). Then, it is necessary to review the capacity of Temporary Evacuation Sites (TES) and Final Evacuation Sites (TEA), so that people can practice social distancing and need to carry out routine disinfection before a disaster occurs. Evacuation locations also need to be prepared by ensuring the availability of hygiene facilities. Such as clean water, hand washing equipment, soap and hand sanitizer (Bnpb, 2021).

The organization also should consider about Train additional people to respond in an emergency, in the event of illness, self-isolation or quarantine resulting in a shortage of trained workers in the workplace. Based on previous experience, both in Indonesia and in other countries, it is highly recommended to provide shelter, especially for quarantine or isolation purposes, to be carried out independently and not to use public facilities. This is because being in an independent facility can guarantee the application of existing health protocols, especially related to COVID-19, namely maintaining distance from others and implementing a clean and healthy lifestyle regularly. In shared/collective/public shelter facilities, these things become very difficult to do. Therefore, the use of private residences or official residences is strongly recommended for use in quarantine or isolation purposes. Another good practice is to use lodging places, such as hotels and motels (or the like), education and training centres, social rehabilitation centres, and pilgrimage hostels are the next choice, considering that these places are designed to accommodate individuals to settle down (Indonesian Ministry of Social Affairs., 2020).

The organization also should consider about Provide first aid workers with personal first aid resources, including appropriate PPE, in the event of a medical emergency or accident. The best way to prevent work accidents is to eliminate the risk or treat the source of the hazard technically. If technical control of sources of danger cannot provide sufficient protection for workers, then the company is obliged to provide appropriate PPE to minimize risks and potential hazards in the workplace. Employers/administrators and workers must understand the types and functions of PPE, the obligations that must be carried out regarding PPE, PPE management, and other important matters regarding PPE in the workplace. (<https://eltrajaya.com>, 2022)

The organization also should consider about Provide clear guidance on the process for dealing with an aggressive or violent person. Anwar and Anidar (2018) explain that frustration

influences aggressive behaviour. when individuals feel hindered in achieving goals, hindered in fulfilling certain needs or desires, expectations or actions, causing frustration that can trigger individuals to become aggressive. This can happen to employees during the covid pandemic, so organizations need to anticipate this.

Organizations should also change contingency plans to reduce the risk of transmission of the Covid 19 virus in emergency situations, to the extent reasonably practicable. Organizations also should require workers who provide assistance to others in emergency situations to take additional hygiene measures immediately after an emergency, including washing hands or using a hand sanitizer. PD ISO/PAS 45005:2020, (2020) said the organization should take a systematic approach to determining and addressing risks related to COVID-19 and identify work activities that: can be done from home; cannot be done from home and cannot comply with physical distancing guidelines in the workplace; cannot be done from home, but can comply with physical distancing guidelines in the workplace, if practical adjustments are made.

In addition to explaining the stages of the business continuity plan, the Minister of Manpower Circular Number M/7/AS.02.02/V/2020 also discusses the health protocols that must be implemented in the workplace to prevent the transmission of Coronavirus Disease 2019 (COVID-19) [4,6,9]. The health protocol that must be implemented includes: (1) maintaining a clean and sanitary work environment; (2) providing a non-contact thermometer to check the worker's body temperature before coming to work and paying attention to the health condition of workers. Workers with a body temperature of above 37.5 °C or with symptoms of cough/cold/sore throat/shortness of breath are not allowed to work in the workplace; (3) setting up the distance between workers to be at least 1 m and urging workers not to have physical contact with other workers; (4) providing hand washing facilities, such as soap or hand sanitizer and running water; (5) ensuring that all workers must wear masks when going to work or leaving their homes, (6) providing education and outreach to all workers regarding COVID-19, such as what COVID-19 is, its causes, symptoms, ways of transmission, and preventive measures; (7) if there are workers showing COVID-19 symptoms, the health workers or OSH experts in the company need to report and coordinate with relevant agencies and provide education about independent isolation to these workers, and (8) arranging the company work system so that workers can work at home or schedule workers who have to continue working at the office to minimize the number of workers working at the same time (Lestari dkk., 2022).

This is in line with research results from Nuranto et al. (2022) stating that Implementation of prevention efforts and control of Covid-19 at PT. XYZ plantation units are carried out based on the rules and policies of the parent company, the government. The author thanks to all parties who have played a role in carrying out this research including the management and employees of PT. XYZ garden unit for taking the time and providing the opportunity to carry out the research as well as academic supervisors who have provided direction so that this research was carried out maximally published. regional, and national. The positive impacts are felt such as increased health surveillance and awareness health. Company PT. Covid-19 Prevention Action Plan. XYZ with priority on social distancing and distancing. Commitment to prevention and control of Covid-19 workers for Implementation maintain the Guidelines policy refer to always emphasized leadership from the top level to the bottom level. Test procedure quickly carried out against workers who will leave or enter the area company.

Based on the explanation above, it can be seen that organizations need to be prepared during the COVID-19 pandemic including leadership, risk management, case management, health protocols, 3T (tracking, testing and treatment), emergency management, and case investigations

have been identified as elements key to enter. The scoring system can be based on the level of implementation of each element. Several strategies have been identified to better manage the pandemic including worker and community participation, worker and public led crisis communication and the RCCE (Risk Communication and Community Engagement) strategy.

CONCLUSION

The COVID-19 pandemic is currently still ongoing throughout the world, and has a very large global impact, so that every country and company must jointly make efforts to control to prevent the spread and handling of COVID-19. The results obtained are assessing compliance with the mining company's pandemic preparedness plan and comparing it with the checklist developed from ISO/PAS 45005:2020. The results suggest several elements for COVID-19 pandemic preparedness including leadership, risk management, case management, health protocols, 3Ts (tracing, testing and treatment), emergency management, and case investigations have been identified as key elements for inclusion. The scoring system can be based on the level of implementation of each element. In conclusion, to be better prepared for future pandemics, several strategies have been identified to better manage the pandemic including worker and community participation, worker and public led crisis communication and the RCCE strategy.

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