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**BEST STRATEGY CONTROL ON SAFETY & HEALTH  
PROCEDURE DURING PANDEMIC COVID-19 IN  
FACILITIES MANAGEMENT MANUFACTURING  
INDUSTRIES IN PENANG.**

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## **ABSTRACT**

The manufacturing industry is a basic need for all to represent economy in Malaysia, perhaps the most difficult class of largely building sector to maintain because of pandemic Covid-19 and the complexity of engineering services to keep manufacturing run. Besides, the facility management need to play huge role to develop and maintain the best strategies and procedure on this pandemic stage to achieved the business goal and keep the organization in the building runs smoothly. Furthermore, the safety and health need to take in serious condition for this building due to pandemic, reducing working hour and limit working staff at certain department that involved. The aim of this research is to provide an overview about to determine and rank the best strategy control on safety and health procedure of facility management manufacturing industry during pandemic covid-19. The first objective identifies the compliance on guidelines of standard operation for employee that are implemented during movement restriction order at manufacturing industry. The second objective, to measure the level of awareness of the occupant in the building about the safety and health procedure that implemented during pandemic covid-19 for the last objective is to determine and rank the best strategy control on safety and health. To achieve the objectives of this research, the questionnaire was distributed toward top management and the staff. The total of 100 questionnaires completed that return to designed an information for descriptive and ranking analysis for both case study. Results for this research can be concluded that there are 3 main influence visitor which are from another state need to do the swab test before entering the premises, isolated people that have symptom at provided and prioritize the social distancing in the manufacturing by following the guidelines that are provided.

**Keywords:** *Facility Management, Manufacturing Industry, Pandemic Covid-19, Safety and Health*

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# CHAPTER 1

## INTRODUCTION

### 1.1 RESEARCH BACKGROUND

In December 2019, a group of cases of viral pneumonia of unknown etiology (VPUE) appeared in Wuhan, a large city in China with a population of 11 million people. The disease was quickly identified as the result of a novel coronavirus (SARS-CoV-2; originally known as 2019-nCov), and pneumonia was named 2019 coronavirus disease, Covid-19. This pandemic emphasizes the importance of always being alert to shifts both in the context of global and national dynamics, ensuring that everyone knows which approaches are successful for the prevention, containment, treatment of new diseases, and is flexible enough to adapt responses accordingly, (Ning-Ning Liu et al 2020). According to WHO (2020), transmission of covid-19 is similar to MERS and SARS for which human to human transmission what occur through droplets, aerosols and direct contact.

According to DG Hisham (2021) in live press conference, 91% cluster are from the workplace and 11% is from the construction. 80% of the cluster in Selangor are from manufacturing industry as mentioned by MB Selangor, Datuk Seri Amirudin Shari (2021). As mentioned by Daniel Kronenwett (2020), the covid-19 outbreak has shaken manufacturing industries profoundly. In an effort to combat it, governments all over the globe are banding together with the objective of safeguarding and treating their populations, restricting the virus's spread by preserving the stability and health of companies, (Goniewicz et al., 2020).

Through environment-mediated mechanisms, Facilities Management (FM) services have the potential to either minimise or create a prevention ground for viral transmission in a building, (Dietz et al., 2020). Fm provided the healing environment and variety of soft support services to the core of business. FM must maintain a condition of continual compliance and perpetual preparedness in order to maintain and assure appropriate operation of the physical environment to support core business, (Lucas et al, 2013).