

# Emergency department infection control strategies in response to COVID-19

## 1 | PREFACE

The government of Taiwan has taken a proactive approach to responding to the COVID-19 pandemic, with only 393 confirmed cases and 6 deaths so far, most of which have been people returning from overseas.<sup>1,2</sup> Here, we would like to share our experience and describe the policies implemented at our Emergency Department by the contingency team of Kaohsiung Municipal Siaogang Hospital.

## 2 | POLICIES OF THE EMERGENCY DEPARTMENT IN RESPONSE TO COVID-19

### 2.1 | Fever screening station in Zone B

The fever screening station in Zone B was established in 2003 during the SARS outbreak, and it is used as a space to diagnose and treat patients with unknown emerging infectious diseases who are not allowed to enter the internal space of the Emergency Department. In response to the COVID-19 epidemic, this area accommodates patients with a specific travel history and fever or respiratory symptoms. For patients with respiratory symptoms, there are four independent spaces, including one emergency room, all with negative-pressure equipment, and the function is tested by a dedicated team every day. Patients who need to be admitted to the 9B negative-pressure isolation ward will be taken by an emergency nurse via a restricted line and elevator.

### 2.2 | Daily temperature monitoring and recording of the staff

In order to check changes in body temperature of the staff throughout the whole hospital, their body temperature is checked and recorded in the hospital's electronic system every day. The unit supervisor monitors the temperature and notification rate of colleagues, and pays attention to and tracks changes in body temperature of all staff.

### 2.3 | Infrared body temperature detector

In order to check whether the body temperature of the emergency personnel is abnormal, an infrared temperature detector has been installed next to the guard room. If the forehead temperature of the person entering the emergency department is higher than 37°C, a warning will sound, and security staff will guide the person to the inspection station where their ear temperature can be confirmed.

### 2.4 | Move the inspection station outdoors

In response to the epidemic and to prevent patients with a fever and a travel history to foreign countries or China from entering the Emergency Department, we moved the inspection station to outdoors, just on the right side of the emergency door. After the asking about the travel, occupation, contact and cluster (TOCC) history, the emergency personnel will take patients with a fever and a travel history to foreign countries or China to Zone B (the outdoor area by the Emergency Department) for consultation. Patients with no travel history are allowed to enter the Emergency Department to see a doctor in order to achieve diversion.

### 2.5 | Management of epidemic prevention supplies

In order to effectively manage the quantity of epidemic prevention supplies and reduce waste, the commissioner will check the daily usage and register details using Google forms for the supplies, including masks, N95, face masks, DuPont isolation suits, and disposable waterproof isolation suits. Supplies that are regulated, such as masks and DuPont isolation suits, are carried on a book to facilitate the supply room to monitor the use of supplies throughout the hospital.

### 2.6 | Separation of emergency department and outpatient department

The control doors on both sides of the Emergency Department are restricted. Patients visiting the Emergency Department need to use a

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bar code provided on a wristband to enter and exit the Radiology Department for examinations, and outpatients enter and exit from the front gate to separate the patients visiting the Emergency Department and Outpatient Department.

## 2.7 | Checking the TOCC of the patients and their family virtual private network

In order to confirm the correct TOCC history, the travel and contact history of the patients and their families are checked via the system of the Ministry of Health and Welfare of Taiwan through their National Health Insurance cards. After confirming no travel and contact history, they are allowed to enter the Emergency Department. In order to reduce the risk of infection, only two people are allowed to accompany each patient.

## 2.8 | Clean and disinfect the work area every third rotation

Thorough environmental cleaning and disinfection is an important measure for reducing the source of infection in medical institutions. Therefore, the Emergency Department adopts a three-shift per day rotation system. The emergency staff must sterilize the major areas, such as mobile work trolley, nursing station desktop, computer mouse, keyboard, and so on before leaving work. The environmental cleaning work is checked by the head nurse.


We hope that our experience will be helpful for other medical service providers.

## CONFLICT OF INTEREST

All authors declare no conflict of interest.

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