

# **A Brief Introduction to Containment Efforts against COVID-19 in Guangzhou**

## **1. An Overview of Guangzhou**

Guangzhou, capital of Guangdong Province and a national gateway city in South China, it has an area of 7434 square kilometers with 11 administrative districts. The city has a population of 22 million of which more than 10 million short term residents. Guangzhou is a national gateway and integrated transport hub. Its annual transport turnover exceeds 500 million person times, and over 6.2 billion public transport commute in the city, which lead to higher potential disease transmission risks.

Guangzhou is China's third-largest medical hub with 5,093 medical institutions (including 269 hospitals), 6.5 beds per 1000 persons. Healthcare services are reachable in 15 mins in urban areas, and 30 mins in rural areas. Eight National or regional medical centers are all in Guangzhou, among which, the First Affiliated Hospital of Guangzhou Medical University is enlisted as a National Respiratory Medical Centre. All 9 Top 100 National Hospitals in Guangdong are in Guangzhou, with 5 of them as specialized hospitals that admit COVID-19 patients.

## **2. Current Situation**

As of March 20, there are 366 confirmed cases reported, 335 have been discharged from hospital and 1 death has been reported. 30 cases remained hospitalized. Number of new confirmed cases peaked on early Feb and decline gradually. Imported cases from outside the city are the majority and with solid community movement control, community transmission has been effectively under control. For the past 16 days, no local infected cases have been reported and new cases are imported cases from overseas.

## **3. Key events**

### **January 23**

**Activation of level-1 public health emergency response.**

### **January 24**

Temperature checks were implemented at transport stations, airports and ports of entry.

### **January 28**

Enterprises were instructed to cease operations. The start of the school term was postponed.

### **January 29**

All patients with fever symptoms were required to be screened for Covid-19.

### **January 31**

Temperature checks were implemented and citizens were required to wear masks at all public spaces. All those returned from affected area were required to self-quarantine for 14 days at home and report to hospital once having Covid-19 symptoms.

### February 7

Residential community grid management was intensified to implement entry and exit controls in all residential complex and buildings.

### February 24

**Level of public health emergency response lower from Level-1 to Level-2.**

## **4. Principles and Key Points**

Guangzhou has strong commitment to contain the COVID-19 outbreak. Under the principles of “EARLY PROTECTION, EARLY DETECTION, EARLY DIAGNOSIS, and EARLY ISOLATION”, we have adopted the “ACT” approach to achieve the abovementioned goal, namely:

Administration of government controlled the source of infection in well-organized and effective manner;

Community health service ensured triage of fever clinic visitors, by detecting patients and suspected cases in time and referring to designated hospitals for isolation;

Trinity mechanism is a joint network of thousands of working groups, each of which comprises a social worker, a health worker and a community police.

The following three key points are of the essence of our containment measures, namely: ***control the source of infection, cut the route of transmission, and protect the vulnerable groups.***

***Firstly, detect the infected cases as soon as possible and control the source of infection*** in time through three lines of defense: joint quarantine check points, overall screening at fever clinics, and segmented management by trinity mechanism.

***Secondly, cut the route of transmission by all means to stop the virus spreading.*** It is highly important to immediately transfer the suspected cases to designated hospitals and to complete testing, diagnosis and admission on the day of receiving the patients.

***Thirdly, spare no effort to protect the vulnerable groups to reduce the risk of infection.*** It is of significance to protect children, pregnant women and the elderly; and to protect health workers against hospital infection. “3+1” system of medical rescue was implemented, in which “3” means doctors at first-line attending on-duty, second-line making rounds of visits, third-line participating in group consultation, and “1” means online consultation.

## **5. Mobilizing everyone to participate**

The fight against Covid-19 has to involved EVERYONE in the city as *All FOR ONE and ONE FOR All* is the consensus in the whole society in such special time.

### ***A. Comprehensive public health guidelines and publicity efforts***

City of Guangzhou has issued 178 guidelines, and 49 plans and circulars with respect to health

observation, medical consultation for fever patients, use of facial masks and daily sanitation. Prevention guidelines have been issued for hospitals, schools, enterprises, government institutions and rural villages. A letter to expats has been issued to alert the expat community.

24-hour rolling news on new cases, medical treatments and preventive measures are released through various media outlets. Experts are invited to address the social concerns by answering to journalists.

Mass campaign for education on disease control and prevention has been carried out. Health education videos and posts are played on 130,000 scrolling electronic displays throughout Guangzhou to raise awareness of the Do's and Don'ts regarding Covid-19.

### ***B. Participation by residents***

Community workers and volunteers have been actively enforcing community movement control. Volunteers have stepped up to assist in more than 1,102 programs related to health education, thorough sanitation, and temperature checks. More than 99.7% of the residents have expressed willingness to work with the government in containment efforts.

## **6. Close Monitoring**

### **A. 3 lines of control**

***Joint quarantine check points:*** Temperature screening for all inbound and outbound travelers at railway, bus station, airport, pier, inter-province roads, referring suspected cases with fever or other symptoms to designated hospital.

***3 “must-do” screening to “all screening” at fever clinic:*** NA test for all fever clinic visitors, CT scan for patients eligible for suspected cases, or patients with fever and epidemiological history, epidemiological investigation covering all confirmed cases, emergency, out-patient and in-patient.

***Segmented management by trinity mechanism:*** Segmented management through trinity mechanism, overall inspections, checks and screening—All close contacts get quarantined, all visitors from Hubei checked, all targeted fever clinic visitors requested for NA test.

### **B. Centralized health management**

As of Feb 20, 67 hotels have been designated as centralized health management facilities for close contacts of confirmed cases. Meals and psychological support are provided.

### **C. Home health management**

Those returning from affected areas are required to self-quarantine at home for 14 days and “Eight 1s” measures are taken: 1 health reminder, 1 circular, 1 designated community contact person, 1 free thermometer, 1 dozen facial masks, 1 temperature record sheet, 1 pen, and 1 handbook. Community workers will help to purchase and deliver daily necessities to those in self-quarantine.

### **D. Centralized patient treatment**

13 hospitals are designated for admitting Covid-19 patients. Top experts from the region worked

closely together for group consultations to optimize treatment plans.

**E. Caring for medical personnel**

Families of front line medical staffs are offered one-on-one housework helping. For medical staffs volunteering to Hubei Province, special support from Guangzhou Health Commission, State-owned-Enterprises and hospital has been put in place to support them. Free insurance has been offered to staffs in containment front line.