

INTRODUCTION

The World Health Organization (WHO) issued a global SARS alert on 12 March 2003. Singapore declared a national crisis on 6 April. Worldwide, SARS infected 8000 people and killed 800 in 26 countries. In Singapore, 238 were infected with 33 dead. SARS spread rapidly. Little was known about it and its countermeasures. It was lethal. Fear escalated. People stayed home. Public places, malls and eateries emptied. Public transport use dipped. Healthcare workers were initially shunned by some. Tourist arrivals fell

sharply (-74% in May). Many flights were cancelled. The normally bustling airport became deserted. An already recessionary economy was hence battered. It was a health, economic, psychological and social crisis all at once as the city came to a standstill. Government, businesses and people worked together to overcome it. Within three months, on 30 May, Singapore was taken off the WHO watchlist. The lessons and measures improved Singapore's pandemic defenses and were also adapted globally.

COMPREHENSIVE AND DECISIVE

Singapore initially did not respond fast enough. Early public communications seemed over-reassuring. Some doctors and hospital staff were complacent, contributing to the virus' spread to hospitals. The first affected hospital and patients could have been isolated earlier. It took a month after the first SARS alert to form the high level inter-ministry taskforce.

Once the severity became clear, the crisis was tackled swiftly on three fronts. The first was medical and health related. As the most susceptible group, hospital staff all had to don personal protective gear. Their temperatures were monitored (fever was one of SARS' symptoms). Incoming hospital patients with fever symptoms were separated at first contact. A hospital was designated the SARS hospital to isolate the cases. In the city at large, **temperature screening was made mandatory in schools**, enforced with thermal scanners at airports and seaports, and encouraged in workplaces. The military was mobilized to establish a **nationwide contact tracing system**. Suspected SARS cases were put on home quarantine or daily telephone surveillance; erring on the side of caution, over 12000 contacts were put on them. While several of these pioneering control measures were initially perceived

negatively as draconian, their **effectiveness prevailed and they were later adapted internationally**. The second was **communication**. The government took a cautious and honest approach that was timely, transparent, and thorough. They: – acknowledged the public's fears and uncertainties; – explained worst-case scenarios and advised the public not to let their guard down (even after Singapore was off the watchlist); – provided steps the public could take to protect themselves; – mobilized voluntary bodies to assist; – gave frequent updates on cases and measures; – encouraged everyone to lead normal lives with the adoption of necessary precautions; – apologized for mistakes made. **These efforts built trust and confidence**, and 80% of a survey's respondents felt the official information was accurate, clear, sufficient and trustworthy. The third was economic. The government provided **SARS and economic relief packages** to help affected businesses and sectors. Businesses were encouraged to consider **short term cost cutting measures** such as shorter work weeks, temporary lay-offs, skills upgrading and training.

RESPONSIVE AND UNITED

The government responded flexibly as the crisis unfolded. A taskforce was first set up to understand the situation. The Infectious Diseases Act was then invoked and amended so that several of the control measures could be put in place. When it became clear this was the most severe health crisis Singapore had ever faced, an Inter-Ministerial Committee was formed. Comprising ministers across key ministries, the Committee resolved cross-Ministry issues and tackled the social and economic impact. **Organizations and individuals also rallied together**. Television networks started a **special public education channel**. Scientists deciphered the virus and developed a diagnostic kit. Engineers built temperature scanning machines. Neighbors delivered food and groceries to those under quarantine. Hospitals, community organizations and companies set up video conference facilities for isolated patients to see and talk with their families. Many healthcare workers volunteered to work on SARS cases. Others demonstrated support for these workers including starting a Courage Fund to help and honor them.

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CONCLUSION

Since the SARS crisis, Singapore has continuously strengthened its pandemic defenses. It was thus ready in 2009 and 2013 for the H1N1 virus and Middle East respiratory syndrome coronavirus respectively. Through its experiences and the efforts of many across the city, Singapore now stands at a much higher level of readiness against infectious diseases.

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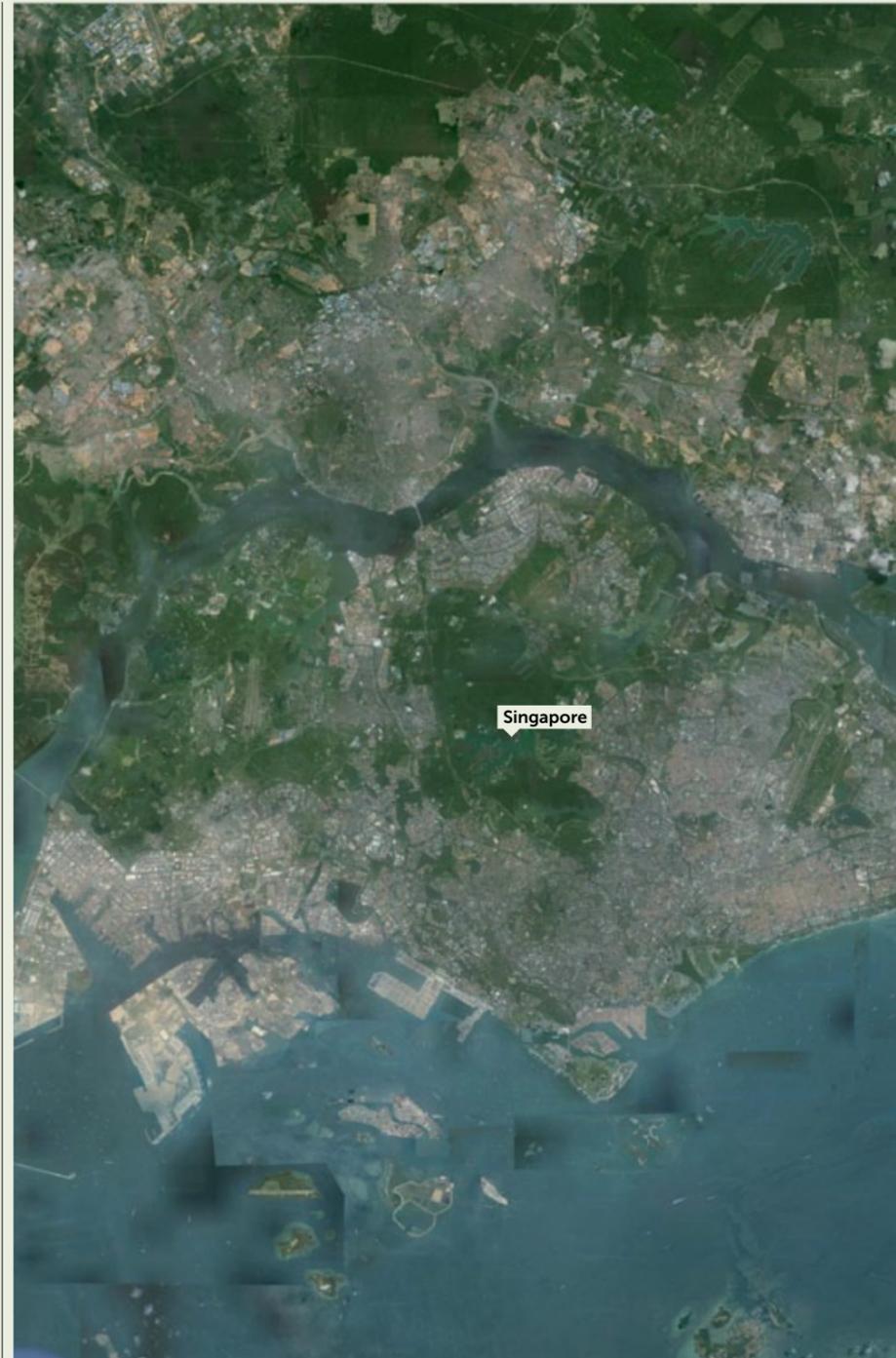
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SINGAPORE



COORDINATES
1°17'N 103°50'E
 AREA
274 sq mi
 POPULATION
5,312,400
 DENSITY
18,943/sq mi
 GDP total
\$327.557 billion
 GDP per capita
\$61,046



2. As the most susceptible group, all hospital staff had to don personal protective gear

3. Hospitals were thoroughly cleaned and disinfected

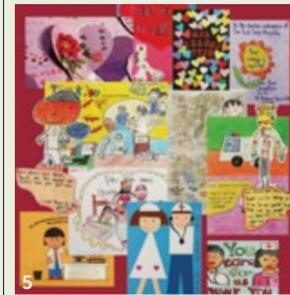


Singapore now stands at a much higher level of readiness against infectious diseases

5. The public rallied behind the healthcare workers, and showed their support in myriad ways



4. Temperature screening was implemented across the city, often with the help of thermal scanners developed by engineers in response to the crisis



SOURCES

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SINGAPORE,
 Republic of Singapore

**FIGHTING SARS
 (SEVERE ACUTE
 RESPIRATORY
 SYNDROME)**

In collaboration with MIT

SA+P
 senseable city lab:::

