

AT THE EPICENTRE

HONG KONG AND THE
SARS OUTBREAK

Edited by Christine Loh
and Civic Exchange

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PREFACE

Christine Loh

...SARS can and must be contained — pushed back out of its new human host. One by one, the many puzzling features of this new disease are being unmasked. One by one, the most severe outbreaks in the initial waves of infection are being brought under control. Recommended measures — case detection, isolation and infection control, and contact tracing and follow-up surveillance — are working. With this reassurance, the image of populations unmasked because of fear, the public face of SARS, can now begin to fade.

— The World Health Organisation (WHO)

20 May 2003

SARS' place in history is assured. It was the first severe new disease to emerge in the twenty-first century. As such, it provided a warning of what could happen in a globally interconnected world where infectious diseases have the capacity to spread rapidly along international air travel routes. Within a period of days, SARS spread from mainland China via Hong Kong to many cities around the world. In the initial stages of the outbreak, doctors did not even know what to call the disease, much less how it should be treated. The symptoms were like those of common pneumonia but the disease was clearly more virulent. For want of a better term, doctors began referring to it as a form of "atypical pneumonia."

Fortunately, SARS was not the global pandemic that communicable disease experts had feared it would be. Despite its ability to spread via

air travel, the disease was relatively inefficient in human-to-human transmission. Had it been more efficient, the world would have been in much bigger trouble. But SARS gave us a sense of what “the real thing” — a full global pandemic — could be like. Many experts fear that SARS could re-emerge as early as the winter of 2003, albeit on a less severe scale. However, new and more deadly diseases could also be lurking and the world needs to prepare for a worst-case scenario — for the emergence of an unknown disease that is efficient in human-to-human transmission. Dr. Henk Bekedam of the World Health Organisation (WHO) has warned that it is not enough to be 100% ready for infectious diseases, the authorities “need to be 300% ready.” A sobering thought indeed. So far, with the exception of HIV/AIDS, few of the new diseases that have emerged during the past several decades have presented a major threat in terms of global public health, which may be why the authorities in developed countries have become somewhat complacent about communicable diseases. Avian flu, Nipah virus, West Nile fever and the Ebola virus are worrying but to date, the impact of these diseases has been regional rather than international. However, health experts were alarmed by certain characteristics of SARS as a disease, particularly its common and non-specific symptoms and its ten-day incubation period — a period long enough to allow carriers who seemed healthy to spread SARS locally and internationally via air travel.

In the future, the outbreaks of greatest concern will be those that occur in transportation hubs, such as Hong Kong, or in densely populated areas, such as south China, because such outbreaks could affect a large number of people, which would in turn make treatment and control much more challenging. Hence, the WHO regards every country with an international airport, or bordering an area where there is an outbreak, as a high-risk area in terms of transmissible diseases. For those of us who live in the south China neighbourhood, SARS brought home to us the fact that our region has a history of being the world’s incubator for new diseases. In a global world, this presents special responsibilities for regional authorities as well as citizens in terms of disease prevention and control.

The worldwide response to SARS was also atypical. Events happened quickly. Healthcare professionals had to face enormous personal risks in fighting the disease on the frontline. Scientists around the world collaborated to an unprecedented degree to find out what they could about SARS as the first step in discovering a cure. Need has been the

mother of a number of useful inventions, such as the contact tracing system developed in Hong Kong. SARS also touched almost every other aspect of personal and community life in affected areas. Ministers and officials lost their jobs. Many businesses suffered. Ordinary people were forced to reassess their priorities. Communities had to find useful ways of coping with panic while continuing to fight the disease.

* * *

This book opens with a **Calendar of Events** compiled by William Chiu and Veronica Galbraith, two researchers at Civic Exchange, which shows key local and international events between November 2002 and September 2003. As this timeline illustrates, the pace of the SARS outbreak was breathtaking and overwhelming, particularly for communities dealing with the disease. The Calendar provides a useful reference for readers and sets the stage for Chapter 1, **Unmasking SARS: Voices from the Epicentre**, written by seasoned reporters Alexandra Seno and Alejandro Reyes. This chapter describes the looming SARS crisis by piecing together different narratives to give a sense of how SARS affected the lives of individuals in Hong Kong.

I am grateful to Dr. Moira Chan, a well-respected respiratory health specialist, for contributing Chapter 2, **At the Frontline: The Medical Challenge** traces the progression of the disease from its emergence in mid-November 2002 in Guangdong Province, China, to its transmission to Hong Kong in February 2003, from where it was exported via air travel to Singapore, Vietnam, Toronto and other international cities. In each of the affected areas, the pattern of infection was the same. The disease first took root in hospital settings when healthcare workers were unknowingly exposed to the infectious agent. Hospital staff then spread the disease to the community. Chapter 3 is the personal story of a distinguished doctor who himself became a SARS patient. Gregory Cheng's **Healing Myself: Diary of a SARS Patient and Doctor** recounts his personal experience of SARS on a day-by-day basis. His insights as both a doctor and a patient contribute to our understanding of the disease and its impact on human lives. Dr. Chan and I co-wrote Chapter 4, **The New Coronavirus: In Search of the Culprit**, which describes the role of scientists from Hong Kong and around the world in learning more about the new disease and summarises what we know about the virus to date.

In addition to the immediate medical challenge, SARS also presented

a major public health challenge for Hong Kong. Public health scholars Gabriel Leung, Anthony Hedley, Edith Lau and Tai-Hing Lam co-wrote Chapter 5, **The Public Health Viewpoint**, which highlights the response of local officials and institutions to the outbreak. The authors discuss the need for additional information about the disease for effective disease control in the future and make a plea for improvement in the internal communication and culture of Hong Kong's public health institutions in order to achieve deeper and broader collaboration among the stakeholders involved in health management.

During the SARS outbreak, although medical professionals and virologists played a vital role in caring for the sick and identifying the coronavirus, experts in other disciplines could also have made an important contribution had they been more extensively involved in the fight against the disease. For example, aerosol scientists could have helped public health authorities to better understand the spread of infectious diseases. Statisticians could have helped to analyse trends in the outbreak. I was, therefore, particularly keen to have Alexis Lau and Stephen Ng contribute to this book. Dr. Lau is an aerosol scientist and a mathematician. His Chapter 6, **The Numbers Trail: What the Data Tells Us**, shows how non-medics could have helped to unravel some of the questions and controversy surrounding infection and death rates for the disease. Dr Ng, an epidemiologist, contributes a fascinating Chapter 7 titled, **The Mystery of Amoy Gardens**, Amoy Gardens was the housing estate where between 21 March and 1 April 2003, 187 residents and 142 households were affected by SARS. Dr. Ng helps us to understand various theories as to why this housing estate was so susceptible to SARS and why, despite studies by the Hong Kong Government and the WHO, this mystery has yet to be fully resolved.

In addition to the obvious impact of SARS on medicine, public health and science, the impact of SARS on Hong Kong politics also deserves serious consideration. Michael DeGolyer discusses the effect of SARS on local politics and the many challenges it posed for officials in Chapter 8, **How the Stunning Outbreak of Disease Led to a Stunning Outbreak of Dissent**. His chapter also looks at the relationship between SARS, Article 23 legislation and Government accountability from a political perspective, particularly in terms of the massive 1 July 2003 demonstrations. I have contributed a chapter focusing on the politics of Hong Kong and mainland China, including the role played by the

WHO. Chapter 9, **The Politics of SARS: The WHO, Hong Kong and Mainland China**, explores the relationships between Hong Kong and Guangdong, Guangdong and Beijing and Hong Kong and Beijing. Chinese efforts in terms of disease control and prevention were critical in the fight against SARS worldwide. China's initial denial of the severity of the disease contributed directly to the extent of the global outbreak. In Chapter 10, **SARS and China: Old vs New Politics**, YIP Yan Yan and I highlight what we believe are the inherent contradictions in the Chinese political system, which continues to favour secrecy over transparency even as national leaders seek modernity and global recognition of China as a responsible world power.

The next three chapters help to provide a more complete picture of Hong Kong's SARS experience. Economist Stephen Brown offers a useful discussion of Hong Kong's political economy in Chapter 11, **The Economic Impact of SARS**. He shows that SARS actually had little impact on the overall economic picture, although individual businesses, especially those in the travel and hospitality sectors, obviously suffered. Indeed, Hong Kong's amazingly successful external sector, which includes trade and global manufacturing, appears not to have been affected at all. William Chiu, Veronica Galbraith and I take a look at how Hong Kong was affected by international media reporting on SARS as well as the controversial role played by the Hong Kong media in Chapter 12, **The Media and SARS**. The local media felt conflicted by its role as objective bystander and its desire to use media channels to participate directly in fighting SARS.

Finally, Jennifer Welker and I examine the community response to the outbreak in Chapter 13, **SARS and the Community**. The disease had the effect of forcing individuals to reassess their personal priorities and companies to consider their social responsibility. The sense of community solidarity was one of the most enduring aspects of the SARS experience and may prove to be one of the most significant in terms of Hong Kong's future.

I provided the concluding Chapter 14 on **Lessons Learned**. This chapter summarises some of the key points noted by other authors as well as providing additional insights on the impact and legacy of SARS, particularly in light of the findings of the SARS Expert Committee Report, released on 2 October 2003, and the Hospital Authority Review Panel Report on the SARS Outbreak, released on 16 October 2003.

Like many organisations in Hong Kong, Civic Exchange sought to contribute to the fight against SARS in some way. How could we participate most usefully as a public policy think tank? In April 2003, we drew on our network of researchers to provide SARS data to the public as and when it became available. Later, we helped to found *Fearbusters*, a community campaign to develop short- and long-term projects related to disease prevention and improving public hygiene. We closely followed SARS-related events as they took place, both locally and globally. When Hong Kong University Press suggested that we consolidate this information and write about the lessons learned from SARS, we were delighted to do so. This book is the outcome of that suggestion.

Having the opportunity to help write and put this book together also represents the culmination of a very special personal experience. As the devastating impact of SARS on the community became evident, I found myself at a loss as to what I could do for Hong Kong. My feeling was that we needed to deal with our fear first and foremost so that we could assess the risk of catching the disease objectively and take effective preventative action, both on a personal and on a societal level. I believed strongly that providing the public with timely information at the outset would have helped to ease panic. Since I manage a research organisation, my focus is on informing people about issues and events from as broad a perspective as possible. This is how I thought I could contribute. I learned what I could about SARS and tried to provide information and analysis to others through Civic Exchange and the *Fearbusters* campaign. This became a personal journey through which I met many caring and energetic people who all wanted to help Hong Kong. Today, my most vivid and meaningful memories from the outbreak are of working together with people from all walks of life and being able to share my fears and hopes for the future with others. I am also aware of the pain and grief that SARS has left behind in the community. Each illness and death affected many lives. In recognising the positive aspects of SARS as a learning experience, we must not forget that there were irreparable losses.

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We are grateful to all of the authors for their willingness to participate in this project and for writing so enthusiastically and speedily. Each

played an important role, whether directly or indirectly, in fighting SARS. We also wish to thank Elizabeth Hutton, Veronica Galbraith and Joanne Bunker for their editorial advice and assistance, and Colin Day for his wise counsel and constant encouragement in helping us get this book out on time.

As a whole, we hope this book will tell the story of Hong Kong's SARS experience from a variety of perspectives. Civic Exchange believes that by considering this experience widely from the viewpoint of experts as well as generalists, the book provides an honest account of what life was like at the epicentre of the SARS outbreak. It looks at the question of how the people of Hong Kong perceived what was happening to them and whether this has altered their sense of identity and community. Hopefully, the experience of SARS and the lessons that can be learned from it will help Hong Kong and other cities to be more prepared for dealing with similar emergencies in the future.

Shortly before this book went to print, the government-appointed SARS Expert Committee released its report on the public sector's handling of SARS. That report was followed by the release of the Hospital Authority Review Panel report on the SARS outbreak two weeks later. Both reports point to a lack of leadership, absence of strategy and contingency planning and poor communication and crisis management skills as major weaknesses of Hong Kong's healthcare system. However, the finding by the Expert Committee that no one with the power to make decisions was responsible for error does little to address public demands for increased accountability and transparency on the part of the authorities. While the Review Panel report was highly critical of many aspects of Hong Kong's handling of SARS, it also avoided the issue of accountability. Had time permitted, I would have liked to include an additional chapter to this book that compared the findings of the two reports.

The Tung Chee-hwa administration needs to understand that its unpopularity, as demonstrated by the massive public protest on 1 July 2003, is due to its governance style and poor decision-making. Its abhorrence of fault finding is characteristic of its approach to running Hong Kong. In politics, those who hold power must be able to move on from mistakes so that new opportunities for the renewal of public trust are created. Finding individuals to be at fault is never an easy task. Indeed, it is unpleasant and difficult. But to try and explain Government errors by saying that officials tried their best, that SARS was a new threat

or that it is better for officials to stay in power because they have learned from past mistakes rings hollow to the public — particularly given the high human and economic cost of SARS for Hong Kong. Moreover, lingering doubts about the competency and transparency of officials will continue to fester and sap the credibility of the administration as a whole. It would be equally painful for the individuals concerned to remain in power and be forced to continue to defend their actions and decisions. A more effective approach would be to remove individuals responsible for error from office and signal a new beginning by introducing fresh faces.

Undoubtedly, there are important lessons to be learned from SARS. The question remains whether Hong Kong authorities are ready to learn them and change accordingly.

Christine Loh
Chief Executive Officer
Civic Exchange
October 2003

Lessons Learned

Christine Loh

SARS provided a dramatic demonstration of the global havoc that can ensue following the emergence of a new infectious disease. Public health authorities, doctors, nurses, other hospital workers, scientists and laboratory research staff around the world struggled to cope with SARS. Public panic was widespread in many parts of the world that were affected. Some government officials lost their jobs due to mishandling of the situation. The short-term economic impact was severe and painful. Hospitals, schools and many places of entertainment had to be closed, and travel advisories were imposed that greatly limited international travel.

Now that the outbreak has subsided, what are the lessons that need to be learned? There are four key aspects of the 2003 SARS outbreak that stand out, upon which all other issues hang. First, SARS was the first severe and readily transmissible new disease to emerge in the twenty-first century. As such, it was a reminder that while modern science has done much to improve public health it has not conquered disease. Second, in controlling the spread of an infectious disease, every hour counts. Timely and effective communication among key decision-makers is critical in crisis management; communication with the public is also essential in keeping the community informed. Implementing preventative and control measures requires decision action, among the most important measures being basic, low-technology initiatives such as

isolation and quarantine arrangements. Third, although SARS appears to have originated in Guangdong Province as early as November 2002, because mainland China refused to acknowledge the extent and severity of the disease, Hong Kong became the de facto epicentre of the outbreak. In other words, the lead actor in the SARS story was really mainland China but Hong Kong played the key role because it was in a tiny corner of the country that had a free media and an independent medical profession, both factors that proved critical in providing information about the new disease to the nation and to the world. Last, the outbreak gave the people of Hong Kong a chance to see how their society operated under intense stress. The experience contributed to a sense of gratitude and community pride that resulted in an unexpected show of unity on 1 July 2003.

The face of the new disease

SARS' place in history is assured. It was this century's first major public health scare. The outbreak may have given the world a taste of what is yet to come, as virologists continue to worry about the possible emergence of a highly infectious disease that has the capacity to transmit efficiently from person to person. Due to modern air travel, new diseases can spread very quickly around the globe, as SARS has shown. In the case of SARS, the world was lucky that the infectivity of the virus was relatively low.

SARS reminded the world that modern medicine has yet to defeat infectious diseases, despite significant advances. Rising standards of living in many parts of the world mean that increasing numbers of people can afford better food and accommodation, leading to higher disease resistance and improved public hygiene. There have been many public health successes over the past hundred years. For example, small pox, once a major killer, can now be avoided through vaccination. Other diseases like diphtheria can be cured using antitoxins, while plagues can be brought under control by preventative measures such as isolation, quarantine and pest control. In many parts of the world, the spread of cholera has been contained by improving water supplies. Antibiotics can now be used to treat typhoid, enteric fevers, syphilis and pneumonia. The result has been a significant drop in the world's death rate, due largely to better management of infectious diseases. Yet SARS was

worrying because it was a new disease that came from a virus that had the capacity to mutate, raising important questions about the future evolution of outbreaks and the development of cures.

It is easy to focus on the mechanical aspect of disease prevention and control in terms of developing better diagnostic tests and finding the right vaccine and ignore the more complex underlying concerns. Though exceptional in terms of its impact and ease of international spread, SARS is only one of around fifty internationally important outbreaks in any given year, according to the World Health Organisation (WHO).¹

Twenty years ago, experts warned that the intensive farming of animals and the close proximity between humans and animals that is prevalent in south China provides “an ecosystem for the interaction of viruses” (see Chapter 5). Furthermore, the ways in which animals are caught or reared and slaughtered in this region are far from humane or healthy. Animal protection laws are often openly flouted. Cooped up in cages or tight spaces, animals farmed for food often develop many types of illnesses. In south China, the wild animal trade provides exotic dishes in ever-larger quantities as income levels increase. Wild animals are reservoirs for all types of viruses. The discovery of a possible linkage between the SARS-coronavirus and the civet cat and other wild animals slowed consumption of these species and led to a Chinese Government ban on the trade and transportation of wild animals in May 2003. However, by July 2003, the ban was lifted. It seems that the SARS outbreak slowed the consumption of exotic animals only temporarily.

Beyond intensive farming and hunting of wild animals for food and other uses, the degradation of the natural environment in south China, as a result of rapid development, has resulted in widespread pollution of the air, water and soil. Pollution causes ecological imbalances that have a negative impact on public health. Living in polluted environments weakens the immune system of both humans and animals, resulting in a higher incidence of sickness. Moreover, when human diseases are treated with strong drugs such as antibiotics, not only do viruses build up resistance to the drugs over time, but also the body’s own defence mechanisms may become weakened.

Thus, SARS represented more than a medical challenge. Public health is intimately linked with the state of the natural environment, which goes beyond improving hygiene. No amount of superficial cleaning of streets and buildings is sufficient to reverse the kind of

ecological disturbance brought on by massive development projects that clear forests, divert rivers, change the climate or poison the land and waters. To ensure a healthy future, society has to take a much more holistic approach that includes reassessing whether its development path is sustainable on a long-term basis. This is unfortunately something that authorities in Hong Kong and Guangdong have yet to consider seriously.

Every hour counts

In an infectious disease outbreak, every hour counts, “as the window of opportunity for preventing deaths and further spread closes quickly.”² Once the disease has affected healthcare workers in significant numbers and is present in the general community, it becomes much harder to control. Governments and healthcare professionals therefore need to move quickly to contain the spread of the disease. SARS demonstrated that responding to an outbreak requires good communication among key decision-makers so that information can be amassed, analysed and acted upon. An effective response extends beyond providing medical care to patients and may continue long after the disease itself has subsided. SARS not only had a significant impact on medical treatment and practice, it also created a substantial political challenge and possibly even a legal challenge for the authorities.

In the case of Hong Kong, questions continue to be raised about the timing and effectiveness of the government’s response to SARS. For example, did Hong Kong’s health officials pay attention to a press statement issued by Guangdong authorities on 10 February 2003, acknowledging that there was an outbreak of atypical pneumonia across the border that had infected 305 people and caused five deaths? The report of the government-appointed SARS Expert Committee released on 2 October 2003 noted that Hong Kong’s Department of Health sought information about the outbreak from Guangdong authorities on 10 February but that this request was ignored. Hong Kong then contacted the Ministry of Health in Beijing.³ It is unclear what information Hong Kong received from Beijing but it is clear that Hong Kong officials were not provided with the expert report on atypical pneumonia in Guangdong (mentioned in Chapter 9) given to the mainland authorities on 23 January 2003. Had Hong Kong received information in early February, many lives could have been spared. While the failure to share

information openly is a legacy of the mainland culture of official secrecy, it also reflects the fact that Hong Kong appears to have been totally helpless when dealing with mainland authorities.

Nevertheless, on 11 February, Hong Kong's Hospital Authority (HA) and Department of Health did take the step of setting up a joint task force, called the Working Group on Severe Community-acquired Pneumonia, to identify pneumonia cases in Hong Kong similar to those reported in Guangdong. The HA is a statutory body that manages Hong Kong's 43 public hospitals and works closely with the Department of Health. Thus, as early as February, health professionals were anticipating that the disease could easily enter Hong Kong, despite Guangdong's claim that the situation across the border was "under control." The number of daily passenger crossings between Hong Kong and Guangdong is in the region of 250,000 to 300,000 people. Describing the work of the Working Group, Director of Health Dr. Margaret Chan noted that: "...together with the Hospital Authority [the Department of Health] examined all community-acquired pneumonia admitted into hospitals. We had to find out about the origins of the infection, whether they were caused by germs, virus or flu.... At that time what concerned us most was influenza. It was the winter peak for flu."⁴ Doctors participating in the task force surveillance exercise reported no unusual cases of flu or pneumonia.⁵ However, between 12 and 21 February, the pre-existing influenza infection guidelines and a specially prepared information package entitled "Frequently Asked Questions" about Severe Community-acquired Pneumonia were circulated to all public hospitals in Hong Kong.

On 21 February, Dr. Liu Jianlun, Hong Kong's index case patient, arrived in Hong Kong from Guangdong. Piecing together the data, researchers have concluded that Dr. Liu, "patient zero," infected 12 people, who then infected many more around the world within a matter of days. Hong Kong's Metropole Hotel also became infamous as the point of contact between Liu and other hotel guests who would subsequently become infected. By mid-May 2003, the WHO estimated that of the 8,000-plus SARS cases worldwide at that time, more than 4,000 could be traced back to Liu's two-day stay at the Metropole Hotel.

When Liu was admitted to the Kwong Wah Hospital on 22 February, he was already very sick. He told doctors and nurses that he had come in contact with patients in Guangdong suspected to have atypical pneumonia, but thought that he had recovered. As his condition was

poor, he was put into intensive care in an isolation room immediately. His case was also promptly reported to the HA as well as the Department of Health. On 28 February, Liu's brother-in-law was also admitted to Kwong Wah Hospital with the same symptoms. While the Report of the Hospital Authority Review Panel on the SARS Outbreak, released on 16 October 2003, noted that the HA and the Department of Health Working Group did issue information on infection control to all hospitals, it was critical of the limited efforts by health authorities to alert other hospitals of the potential risks of the disease. For example, while information on infection control was provided to infection control officers in the form of "Frequently Asked Questions" and posted on the HA website, the Review Panel found that the content of informational materials and the way in which they were circulated "failed to get the attention of, and thus warn, staff about the risk of infection."⁶ The Panel also noted the failure to assemble all available data "held by a range of people inside and outside the HA into a single picture,"⁷ and recommended that in the event of an emerging unknown infectious disease, "any indications that it is infective to healthcare workers should be communicated to frontline staff immediately."⁸

According to the Review Panel, the passivity of health and hospital authorities was due to the fact that "there was no strategy or contingency plan suitable for dealing with a major disease outbreak,"⁹ and no "comprehensive, multi-agency strategy for disease prevention and control that puts the health of the public first."¹⁰ The lack of a clear overall leadership structure also raised problems.¹¹

In the rush to put the new Principal Officials Accountability System (POAS) in place by 1 July 2002, the Chief Executive did not allow time to clearly demarcate the responsibilities of a number of official posts. This resulted in some overlap between the responsibilities of the Secretary for Health, Welfare and Food and the Director of Health, leaving Hong Kong without the equivalent of a surgeon general or chief medical officer.¹² In its October 2003 report, the SARS Expert Committee noted that there was an "imbalance between responsibility, authority and accountability in the health system. For example, [the Secretary] has accountability for the health system as a whole...but statutory public health powers are vested in the Director of Health."¹³ More astute members of the Legislative Council (LegCo) had foreseen this type of problem in 2002 when the POAS was implemented, but the Tung administration chose to prioritise speed over clarity of the leadership

structure. The confusion inherent in the way the POAS was implemented was evident following the “penny stocks” incident in 2002. At that time, a review panel noted that the specific responsibilities and powers of the relevant ministerial posts were unclear.¹⁴

Jurisdictional confusion within the system was compounded by the failure of administrators to anticipate the public health implications of the initial outbreak at the Prince of Wales Hospital (PWH). On 10 March, after 11 PWH staff working in Ward 8A became ill, doctors immediately closed the ward to admissions and visitors. On 11 March, hospital administrators upheld the decision to stop patient admissions to Ward 8A but began re-admitting visitors wearing protective gear because they did not want to cause anxiety among patients. Between 11 and 19 March, PWH management increased protective measures incrementally, first cordoning off the floor where Ward 8A was situated and eventually closing its accident and emergency department completely. During this ten-day period, the WHO issued two global alerts about the new disease. Despite the finding of the SARS Expert Committee that the various decisions on the management of the disease were made “collectively at meetings” attended by both administrative and senior healthcare professionals, controversy over the series of decisions that led to a gradual approach in closing PWH never subsided because of the numerous and continued objections from frontline healthcare workers and the medical faculty at the Chinese University of Hong Kong (CUHK), which uses PWH as its teaching facility.¹⁵

The HA Review Panel was much more critical of decision-making at PWH than the SARS Expert Committee. In its report, the Panel described the reopening of Ward 8A to visitors on 11 March as “a step down in the strict infection control measures” introduced on the previous day. Despite the fact that PWH administrators put stricter precautions for visitors in place, the decision to reopen the ward “potentially exposed [visitors], and hence the wider community to infection.”¹⁶ The Panel also noted that CUHK began calling for the closure of PWH on 12 March, “but because there was no effective mechanism for ensuring that the key stakeholders could properly consider the benefits and consequences of such a complex decision, then by default the hospital was never closed.”¹⁷ By contrast, the SARS Expert Committee merely stated that “there was a lack of clarity in the role of university staff in a hospital outbreak situation and failures of communication between HA, DH [Department of Health] and the university.”¹⁸ The price paid for

this “lack of clarity” was substantial: a total of 239 people were infected during the PWH outbreak.

It should also be noted that by the end of February, virologists such as Professor Malik Peiris and his colleagues at the University of Hong Kong (HKU), had already begun to believe that they might be dealing with a new virus.¹⁹ Indeed, on 7 March, the HA’s own Working Group reported to its board (which included top government officials) that the atypical pneumonia cases might have been caused by an “unusual virus.”²⁰ Thus, senior management at the HA and the Department of Health knew that there was a strong possibility that the disease was not just a variant of winter flu and that whatever its identity, its impact on patients was serious.

The HA Review Panel made an interesting observation on this point:

Looking back, information about the virus and the potential havoc it could cause was scant prior to early February. Those privy to information were reluctant to share it, and what was shared often only had the status of rumour. It still remains unclear what was known, by whom and when. It was clear however, that something unusual was happening.²¹

By 15 March, the day the WHO named the new disease “severe acute respiratory syndrome” or “SARS,” it was impossible for Hong Kong authorities to ignore the extent of the outbreak, which had now spread to many countries around the world and resulted in the infection of more than 150 people. Despite these facts, health authorities continued to deny the severity of the outbreak, prompting Professor Sydney Chung, Dean of the Faculty of Medicine at CUHK, to go public on 17 March to contradict statements by the Secretary of Health, Welfare and Food and the Director of Health that the disease had not spread to the general community in Hong Kong. The SARS Expert Committee partially exonerated the Secretary for this lapse by saying that his statement was technically correct at the time it was made but noting that he could have used “a more prudent phrase” — which sounds more like an apology.²² By 21 March, virologists in Hong Kong knew that the causative agent for the disease was a coronavirus. Yet it was only on 24 March that the authorities finally created a special inter-departmental task force to coordinate the fight against SARS; only on 27 March that the government advised people to quarantine themselves for ten days if they had come

into contact with SARS patients; and it was 31 March when they decided to isolate Block E of Amoy Gardens, ten days after large numbers of residents had begun to fall ill. The SARS Expert Committee acknowledged “there were significant shortcomings of system performance during the early days of the epidemic” but was not prepared to find anyone at fault.²³

From the community’s point of view, government prevarication resulted in the loss of valuable opportunities to minimise the spread of SARS. The government even mishandled the setting up of a SARS Expert Committee to review the government management of the SARS crisis. The Committee received bad press from the start, after Chief Executive Tung Chee-hwa appointed the Secretary for Health, Welfare and Food Dr. EK Yeoh as its head. His reasons for doing so seemed incomprehensible because Dr. Yeoh’s own decisions and conduct during the outbreak had to be included in the review. Although the Chief Executive finally replaced Dr. Yeoh as head of the Committee on 17 July, the damage to the government’s credibility had already been done. This is why the public continues to question the Committee’s refusal to apportion blame to key decision-makers. Its explanation that it sought to avoid the “hazards of retrospective judgement”²⁴ is suspect because it would then make it hard to hold officials accountable for any issue or event they do not foresee.

In a further display of public dissatisfaction, more than half a million Hong Kong people took to the streets on 1 July 2003. While the immediate cause of the protest was the Article 23 national security legislation, it was also clear that Hong Kong people had a litany of complaints regarding the performance of the Tung administration since 1997. His insistence on appointing an implicated party to head an inquiry is only one illustration of his governing style, and raised doubts about the sincerity and value of the evaluation process. In this light, one of the local members of the SARS Expert Committee, Dr. Rosie Young, made an extraordinary statement on television on 4 October when she referred to the handling of SARS victims: “The government was very indifferent and did not have enough care for the people. I guess the whole government should learn.”²⁵

On 29 October 2003, LegCo voted to use the powers granted to it under the Power and Privileges Ordinance to conduct an inquiry into how the Hong Kong authorities handled SARS. Both the LegCo process and the HA Review Panel report may help to address public

dissatisfaction with the SARS Expert Committee report, but clearly the preferable situation would have been for the Chief Executive to appointment an independent public inquiry team whose credentials were beyond dispute at the outset. Furthermore, the SARS crisis may give rise to many private law questions in the months to come. There are legal issues to be addressed concerning would-be plaintiffs and potential defendants.²⁶ The government has committed itself to a range of ex gratia payments to certain relatives of healthcare workers who died of SARS. For example, in three cases, the families of the deceased will receive HK\$3 million in assistance payments.²⁷ Nevertheless, frontline medical staff, families of those who died from SARS, those who contracted SARS in hospitals and the residents of Amoy Gardens may still bring lawsuits against the government.

In terms of timeliness, what was truly impressive was the work of the WHO's Global Outbreak Alert Response Network (GOARN), as discussed in Chapter 9, and the network of 13 research laboratories studying the SARS virus that was convened by Dr. Klaus Stohr at the WHO's Geneva headquarters (see Chapter 4). With the help of modern telecommunications and in a spirit of collaboration that enabled professional rivalries to be put aside in the interests of the greater good, experts were able to make impressive strides in understanding the new virus in a relatively short period of time. While much more research remains to be done, the effort by international institutions to work together demonstrated the speed with which information can be transmitted worldwide, contributing to global knowledge. It was also a reminder that expertise and technology are available if the decision-makers responsible for public health understand how to use them. When it is possible to coordinate so many parties in so many parts of the world to work to their highest efficiency, it is harder to excuse poor communication and decision-making within one hospital, such as the PWH, or between two government bodies, such as the HA and the Health, Welfare and Food Bureau.

A further aspect of timeliness is the importance of information management and dissemination in a highly wired world. Modern information technology enables the rapid dissemination of legitimate information, but it also offers a way to publicise rumours and misinformation that can lead to widespread panic. Despite clinical uncertainty about the nature and identify of the new disease at the initial stage of the outbreak in Hong Kong, an important lesson for

governments and public institutions is that it is their responsibility to put out timely information on matters of public concern, otherwise they may lose the opportunity to address public confusion and fears. This became apparent on April Fool's Day when a teenager in Hong Kong used the Internet to make a false announcement that Hong Kong had been declared an "infected port" (see Chapter 13). Again, failure by the authorities to release information about the spread of SARS within the community led four information technology engineers to take matters into their own hands by setting up the website www.sosick.org to provide information to the public on affected areas and buildings. The lesson for the authorities is that failure to take the initiative can result in a "lose-lose" situation where others put out incorrect or false information or citizens end up doing their jobs for them. Either scenario creates perceptions of official ineptitude. Furthermore, Chapter 6 provides a reminder that there is still much useful information about the outbreak that the HA and the Department of Health have not released to the public. The message is clear: in fostering a true knowledge-based society, the authorities play a critical role in how they promote access to information.

Mainland China

The initial response of mainland authorities to the emergence of a new infectious disease in Guangdong was to downplay the situation and attempt to control information. The lesson for Chinese leaders is that stonewalling no longer works well in a wired world. Indeed, in the event of a future outbreak, the best strategy is to be transparent about what is happening, especially in such a vast country. National leaders in Beijing need to have timely information about local events in order to make the right decisions. At the time of the outbreak, national leaders were so preoccupied with the politics of the transition in leadership that they did not see the storm on the horizon even though, as Chapter 9 points out, it seems inconceivable that top level officials were unaware that something unusual was occurring. The Chinese Government should not lose sight of the fact that it lost a valuable opportunity to inform the nation about SARS at the National People's Congress meetings in March 2003, an occasion that could have been used to provide information to the entire country on preventative and control measures. The price

China had to pay for its oversight was substantial — many deaths and loss of credibility worldwide.

Mainland China should have been the epicentre of the SARS outbreak as the disease originated and affected the largest number of people there, not in Hong Kong. As a result of the mainland's refusal to acknowledge the extent of the outbreak in China up until mid-April 2003, Hong Kong, which has a free flow of information, became the de facto epicentre.

As a Special Administrative Region (SAR) of the People's Republic of China, Hong Kong operates under the "one country, two systems" principle. There are many aspects of life in Hong Kong that are fundamentally different from practices on the Mainland. Hong Kong residents enjoy freedom of expression and a free media, neither of which is available to Chinese citizens on the mainland. When SARS hit Hong Kong in February, the local media pursued the story relentlessly once it realised that SARS was an important issue. In fact, reports coming out of Hong Kong about the situation in south China enabled the WHO to press mainland China for more information on what was happening there. No doubt, additional pressure was supplied in the form of diplomatic messages relayed to Beijing from other nations — who were also operating on the basis of information reported by the Hong Kong media. Had it not been for Hong Kong's separate "system," it might well have taken China even longer to address SARS. At least in the case of SARS, the "one country, two systems" principle may be viewed as a blessing in disguise for both mainland China and the global community.

Another difference between Hong Kong and mainland China concerns the role of the Chinese Communist Party, which dominates the mainland government. On the mainland, the Party and therefore the government play a key leadership role in numerous aspects of Chinese life, including the conduct of healthcare professionals. Contrasting the role of Dr. Jiang Yanyong in Beijing and Professor Sydney Chung in Hong Kong, it is clear while both men felt that they must put evidence and professionalism ahead of official objectives, Dr. Jiang faced greater obstacles in finding a way to get out the message that mainland officials were not admitting to the hundreds of SARS cases in Beijing's military hospitals. Although Jiang became a folk hero for telling the truth, he was eventually silenced by the authorities. By contrast, medical professionals in Hong Kong, like Professor Chung, do not regard the government as a superior. They operate independently from the

authorities in the exercise of their professional judgment. Professor Chung always chose his words carefully when speaking in public, as would be expected from a person of his standing.

The SARS crisis showed how important it is to ensure that professionals operate independently of government and can speak out to maintain standards and ensure that official statements are based on actual evidence. On the mainland, the Communist Party has yet to allow truly independent groups to function. There is no shortage of competent, dedicated and courageous professionals on the mainland, but they lack the political environment that permits true independence — a basic requirement for true professionalism. It remains unclear how the Party and the Chinese Government view Dr. Jiang today. It is to be hoped that the fact that Jiang and other mainland physicians did speak out about the official cover-up during the outbreak is a sign that things could be changing for the better. There is no doubt about how Professor Chung is regarded — for Hong Kong people he is a hero.

The culture of official secrecy dies hard even at a moment when Hong Kong, Guangdong and Macau have agreed to be more transparent in sharing information. While the respective authorities have agreed to cross-border reporting on eight diseases and information exchange on all notifiable diseases in their own jurisdictions, this information is still treated as confidential and has not been made available to the public. One important concession is that medical professionals can have access to the information for research purposes, although it remains unclear how the issue will be handled in publishing research findings.

Official abhorrence of openness rubs in other ways as well. The first example is with regard to scientific research. As the Communist Party and mainland government denied the true extent of the outbreak up until 17 April, when the Politburo changed its tune by calling for accurate reporting, mainland scientists were denied the opportunity to carry out scientific studies of the new virus at the first opportunity. The official cover-up therefore also prevented mainland scientists from participating in groundbreaking research. Again, scientists in one tiny corner of the country — Hong Kong — came to the forefront in the investigation of the disease and eventually won international recognition for their work in identifying the SARS-coronavirus.

The second example is the lack of trust in official information. Chapter 9 notes that Shanghai wisely took early precautions to prevent the spread of SARS; this, coupled with some good luck, was critical in

preventing an outbreak on the scale of that experienced by other cities in China and around the world. Yet doubts about the accuracy of Chinese information persist. Lastly, even though government health ministers and the mayor of Beijing were fired as a sign that Chinese leaders wanted accountability, it is doubtful that any internal review reports will be made public. It seems likely that the enquiries on Hong Kong's handling of SARS will be the only reports made publicly available in China.

A renewed sense of dignity

Hong Kong people appeared to have lost their self-confidence since 1997 as the economy softened. Perhaps even more significant in the minds of Hong Kong people has been their adjustment from subjects of a small British colony to citizens of a large country experiencing rapid modernisation. It has undoubtedly been difficult for Hong Kong to redefine itself within the context of an evolving People's Republic of China. As the mainland continues to advance economically, Hong Kong's traditional role as a gateway to China seems to have become obsolete.

Chapter 11 provides a useful perspective on Hong Kong's current economic situation. Hong Kong remains highly competitive, not necessarily in terms of cost (although costs are now more competitive than before), but certainly in terms of its social "software," which includes its management capacity, professionalism, openness and transparency, free media, personal liberties and rule of law. The SARS outbreak brought out many of these strengths, including the ability of the community to work together in the face of tough times. Hong Kong people saw how well many aspects of their society worked. Even in terms of the government, the public saw that despite poor crisis management at the early stages of the outbreak, once the severity of the situation was fully understood and acknowledged, solid advances were quickly made in many areas. For example, Hong Kong developed an impressive contact tracing system for people who had come into contact with SARS patients. Hospitals and healthcare workers revised infection control procedures. These innovations will prove very useful in case of future outbreaks, both in Hong Kong and elsewhere. The calibre of Hong Kong's response to SARS allowed the people of Hong Kong to feel good about themselves and about their community.

Between March and May 2003, Hong Kong dropped almost

everything else to focus on fighting SARS. As the outbreak waned, people began to pick up their lives again where they had left off. One pressing issue was the national security legislation proposed by the government in compliance with Article 23 of the Basic Law, Hong Kong's post-1997 constitution. The article requires Hong Kong on its own to pass laws to prohibit treason, secession, subversion, sedition, theft of state secrets and links between local and overseas political bodies. The Tung administration hoped to pass the legislation on 9 July 2003. As soon as public attention was transferred away from SARS to Article 23, objections to the content of the draft legislation mounted day by day. Non-governmental groups joined forces to organise a demonstration against the draft bill on 1 July 2003 — a public holiday to commemorate the return of Hong Kong to Chinese rule in 1997. In the week leading up to the holiday, it became clear that a large number of people were likely to join the demonstrations. Media reports suggested that there would be over 100,000 protesters.

On the day, over 500,000 people showed up to participate in a march that was entirely peaceful and yet was a powerful expression of the deep discontent of the community with the Tung administration.²⁸ Among the protesters were healthcare workers who wanted to vent their frustrations regarding the government handling of SARS. As noted above, the Chief Executive's subsequent decision to remove Dr. EK Yeoh as the head of the SARS Expert Committee was a response to public dissatisfaction. Furthermore, in the same way that healthcare professionals became local heroes during the SARS outbreak, Hong Kong's legal professionals played a pivotal role in taking a vocal stance against Article 23 and helping the public to understand the complexities of the legislation. This was another confirmation of the strength of Hong Kong's social software and the importance of independent commentary by professionals for the community as a whole. Post-1 July, Hong Kong's interest in politics seems to have been awakened. The call for democratic reform is unambiguous.

SARS presented an unprecedented challenge for Hong Kong. Facing and overcoming this challenge allowed Hong Kong people to feel as though they had regained their dignity. The events of 1 July also forced leaders in Beijing to reassess Hong Kong and consider the possibility that there were many aspects of its development that they did not adequately understand. The rest of the world, which was close to writing off Hong Kong as a has-been because of SARS and Hong Kong's soft

economic performance against rapid advances on the mainland, began to reassess Hong Kong's importance as well. While the stakes for Hong Kong are high, it is clear that it has the capacity to push for changes that will have reverberations on the mainland. This process of change could yield positive results if the protagonists keep a cool head.

NOTES

CHAPTER 2

1. K.W. Tsang, P.L. Ho, G. Ooi, et al., A cluster of cases of severe acute respiratory syndrome in Hong Kong, *New England Journal of Medicine* 2003; 345: 1977–85; S.M. Poutanen, D.E. Low, B. Henry, et al., Identification of severe acute respiratory syndrome in Canada, *New England Journal of Medicine* 2003; 348: 1953–66; N. Lee, D. Hui, A.Wu, et al., A major outbreak of severe acute respiratory syndrome in Hong Kong, *New England Journal of Medicine* 2003; 248: 1986–94; and C.M. Booth, L.M. Matukas, G.A. Tomlinson, et al., Clinical features and short-term outcomes of 144 patients with SARS in the Greater Toronto Area, *Journal of the American Medical Association* 7 May 2003, <http://jama.ama-assn.org/cgi/content/full/289.21.JOC30885v1>.
2. The report of the Hong Kong Hospital Authority Review Panel on the SARS outbreak, released to the public on 16 October 2003, also provides a very useful summary of events and facts. See Section IV: A chronological overview of the outbreak of SARS in Hong Kong, and Section V: The detailed facts. *Report of the Hospital Authority Review Panel on the SARS Outbreak*, Hospital Authority, Hong Kong, September 2003.
3. C.C. Luk, Chief Executive, Kwong Wah Hospital, “Index patient,” *South China Morning Post* 29 May 2003, Letter to the Editor.
4. N. Lee, D. Hui, A. Wu, et al., A major outbreak of severe acute respiratory syndrome in Hong Kong, *New England Journal of Medicine* 2003; 348: 1986–94.
5. SARS Expert Committee, *SARS in Hong Kong: From Experience to Action*, 2 October 2003, pp. 23–35.
6. Ella Lee, “Waging war on an unknown enemy,” *South China Morning Post* 26 March 2003, p. A11.
7. See endnote 5.
8. See endnote 5.

9. World Health Organisation, First data on stability and resistance of SARS coronavirus compiled by members of WHP laboratory network, 4 May 2003, www.who.int/csr/sars/survival_2003_05_04/en/index/html.
10. Department of Health, HKSAR Government, Main findings of an investigation into the outbreak of Severe Acute Respiratory Syndrome at Amoy Gardens, 17 April 2003, www.info.gov.hk/dh.
11. See endnote 1.
12. K.T. Wong, G.E.A. Frazer, D.S.C. Hui, et al., Severe acute respiratory syndrome: Radiographic appearances and pattern of progression in 138 patients, *Radiology* August 2003, 228(2): 401–6 and N. L. Muller, G.C Ooi, P.L. Khong, N. Savvas, Severe acute respiratory syndrome: Radiographic and CT findings, *American Journal of Roentgenology* 2003 (in press).
13. K.W. Tsang, P.L. Ho, G. Ooi, et al., A cluster of cases of severe acute respiratory syndrome in Hong Kong, *New England Journal of Medicine* 2003; 345: 1977–85.
14. Hospital Authority (Hong Kong), Information on management of SARS: Case definition, 30 April 2003, www.ha.org.hk/sars/sars_index_e.html.
15. World Health Organisation, Case definition for surveillance of severe acute respiratory syndrome (SARS), 5 May 2003, www.who.int/csr/sars/casedefinition/en.
16. J.S.M. Peiris, C.M. Chu, V.C.C. Cheng, et al., Clinical progression and viral load in a community outbreak of coronavirus-associated SARS pneumonia: A prospective study, *Lancet* 2003; 361: 1767–72; and World Health Organisation, Use of laboratory methods for SARS diagnosis, 5 May 2003, www.who.int.csr.sars.labmethods/en.
17. World Health Organisation, Use of laboratory methods for SARS diagnosis, 5 May 2003, www.who.int.csr.sars.labmethods/en/; and World Health Organisation, Recommendations for laboratories testing by PCR for presence of SARS coronavirus-RNA, 13 May 2003, www.who/int/csr/coronarecommendations/en.
18. J.S.M. Peiris, C.M. Chu, V.C.C. Cheng, et al., Clinical progression and viral load in a community outbreak of coronavirus-associated SARS pneumonia: A prospective study, *Lancet* 2003; 361: 1767–72; and World Health Organisation, Recommendations for laboratories testing by PCR for presence of SARS coronavirus-RNA, 13 May 2003, www.who/int/csr/coronarecommendations/en.
19. W. Ho, Guideline on management of severe acute respiratory syndrome (SARS), *Lancet* 2003; 361: 1313–5.
20. L.K.Y. So, A.C.W. Lau, L.Y.C. Yam, et al., Development of a standard treatment protocol for severe acute respiratory syndrome, *Lancet* 2003; 361: 1615.
21. J. Gerberding, Lack of in vitro activities of Ribavirin against coronavirus, Centres for Disease Control and Prevention, Press briefing, 22 April 2003.

22. W.K. Lam, K.W. Tsang, C. Ooi, M. Ip, M. Chan-Yeung, Severe acute respiratory syndrome, in *Respiratory Disease: An Asian Perspective*, edited by M.S. Ip, M. Chan-Yeung, N.S. Zhong, W.K. Lam. Hong Kong: Hong Kong University Press 2004.
23. J.S.M. Peiris, C.M. Chu, V.C.C. Cheng, et al., Clinical progression and viral load in a community outbreak of coronavirus-associated SARS pneumonia: A prospective study, *Lancet* 2003; 361: 1767–72.
24. K.L.E. Hon, C.W. Leung, W.T.F. Cheng, et al., Clinical presentations and outcome of severe acute respiratory syndrome in children, *Lancet* 2003; 361: 1701–3.
25. C.A. Donnelly, A.C. Ghani, G.M. Leung, et al., Epidemiological determinants of spread of causal agent of severe acute respiratory syndrome in Hong Kong, *Lancet* 2003; 361: 1773–8.
26. Department of Health. Health, Welfare & Food Bureau, SARS Bulletin, 30 May 2003, www.info.gov.hk/info/infection-c.htm.
27. Ibid.
28. See endnote 5.

CHAPTER 4

1. Matt Pottinger, Elena Cherney, Gautam Nail and Michael Waldholz, “How a global effort identified SARS virus in a matter of weeks,” *The Wall Street Journal* 16 April 2003.
2. David Heymann, Executive Director, Communicable Diseases, World Health Organisation, from a transcript of a conference call on 8 April 2003 in CLSA Speaker Series, *SARS — Hype from Reality*, published by CLSA Emerging Markets. See also Chris Taylor, “In China, it seems the ‘big one’ is yet to come,” *South China Morning Post* 11 May 2003, p. 4.
3. World Health Organisation, Severe acute respiratory syndrome (SARS): Status of the outbreak and lessons for the immediate future, 20 May 2003.
4. See endnote 2. The father, a 33-year-old man, and his nine-year-old son were admitted to hospital on 11 and 12 February respectively. The mother was admitted on 13 February. The father died but the son and mother recovered. The family also had a second daughter who remained asymptomatic throughout.
5. See endnotes 3 and 4.
6. See endnote 1.
7. See endnote 3.
8. See endnote 1.
9. D. Normile, Up close and personal with SARS, *Science* 2003; 300: 886–7, www.sciencemag.org.
10. World Health Organisation Multiple Collaborative Network for Severe Acute Respiratory Syndrome (SARS) Diagnosis, A multiple collaboration to

- investigate the cause of severe acute respiratory syndrome, *Lancet* 2003; 361: 1730–3.
11. J.S.M. Peiris, S.T. Lai, L.L.M. Poon, et al., Coronavirus as a possible cause of severe acute respiratory syndrome, *Lancet* 2003; 361: 1319–25.
 12. Mary Ann Benitez, The struggle to profile a killer, *South China Morning Post* 25 June 2003, p. A14.
 13. T.G. Ksiazek, D. Erdman, C.S. Goldsmith, et al., A novel coronavirus associated with severe acute respiratory syndrome, *New England Journal of Medicine* 2003; 348: 1953–66; and C. Drosten, S. Gunther S, W. Preiser, et al., Identification of a novel coronavirus in patients with severe acute respiratory syndrome, *New England Journal of Medicine* 2003; 348: 1967–76.
 14. See endnote 1.
 15. Lawrence K Altman, “Experiments on monkeys zero in on SARS cause,” *New York Times* 16 April 2003.
 16. Koch’s Postulates are:
 - (a) The organism has to be isolated from diseased tissues of the patient.
 - (b) The organism can induce the same disease in another individual or a close species.
 - (c) The same organism can be isolated again from the infected individual or a close species.
 17. K.V. Holmes, SARS-associated coronavirus, *New England Journal of Medicine* 2003; 348: 1848–1951.
 18. See endnote 1.
 19. Mary Ann Benitez, “SARS study puts civet cats back in the dock,” *South China Morning Post* 5 September 2003, front page.
 20. Ibid.
 21. E.G. Brown and J.A. Tetro, Comparative analysis of the SARS-coronavirus genome: A good start to a long journey, *Lancet* 2003; 361: 1756–7.
 22. M. Enserink, Calling all coronavirologists, *Science* 2003; 300: 413, www.sciencemag.org.
 23. Centers for Disease Control and Prevention, CDC Lab sequences genome of new coronavirus, 2003, www.cdc.gov/od/oc/media/pressrel/r030414.htm; P.A. Rota, M.S. Oberste, S.S. Monroe, et al., Characterization of a novel coronavirus associated with severe acute respiratory syndrome, *Science* 2003; 300: 1394–9; M.A. Marra, S.J.M. Jones, C.R. Astell, et al., The genome sequence of the SARS-associated coronavirus, *Science* 2003; 300: 1399–404; and Y.J. Ruan, C.L. Wei, A.I. Ee, et al., Comparative full-length genome sequence analysis of 14 SARS coronavirus isolates and common mutations associated with putative origins of infection, *Lancet* 24 May 2003; 361 (9371): 1779–85.

24. See endnote 12.
25. See endnote 21.
26. See endnote 12.
27. M. Enserink, Clues to the animal origins of SARS, *Science* 2003; 300: 1351, www.sciencemag.org.
28. Robert J. Saiget, SARS antibodies found in wild animal traders in Southern China, Agence France-Press, 25 May 2003.
29. Rob Stein, “Test results reveal a tough virus,” *The Standard* 5 May 2003, p. B6.
30. World Health Organisation, First data on stability and resistance of SARS-coronavirus compiled by members of WHO laboratory network, www.who.int/csr/sars/survival_2003_05_04/en/index.html, 4 May 2003.
31. Agencies, Josephine Ma and Mary Ann Benitez, “SARS probe will focus on laboratories,” *South China Morning Post* 10 September 2003, front page.
32. Staff reporters, “SARS labs tighten up after Lion City case,” *The Standard* 11 September 2003, p. B4.
33. World Health Organisation Update, What happens if SARS returns? www.who.int/csr/sars/survival_2003_06_26/en/index.html, 26 June 2003.

CHAPTER 5

1. Vu TH, Cabau JF, Nguyen NT, Lenoir M, SARS in Northern Vietnam, *New England Journal of Medicine* 2003; 348: 2035.
2. Poutanen SM, Low DE, Henry B, et al., Identification of severe acute respiratory syndrome in Canada, *New England Journal of Medicine* 2003; 348: 1995–2005.
3. Tsang KW, Ho PL, Ooi GC, et al., A cluster of cases of severe acute respiratory syndrome in Hong Kong, *New England Journal of Medicine* 2003; 348:1 977–85.
4. Lee N, Hui D, Wu A, et al., A major outbreak of severe acute respiratory syndrome in Hong Kong, *New England Journal of Medicine* 2003; 348: 1986–94.
5. Shortridge KF, Stuart-Harris CH, An influenza epicentre? *Lancet* 1982; 2: 812–3.
6. Wickramasinghe C, Wainwright M, Narlikar J, SARS — A clue to its origins? *Lancet* 2003; 361: 1832.
7. Hospital Authority, Section II: Prologue and summary of our analysis, *Response to the report of the Hospital Authority Review Panel on the SARS outbreak*, 16 October 2003, p. 54, paragraph 2.18.
8. Donnelly CA, Ghani AC, Leung GM, et al., Epidemiological determinants of spread of causal agent of severe acute respiratory syndrome in Hong Kong, *Lancet* 2003; 361: 1761–6.

9. Riley S, Fraser C, Donnelly CA, et al., Transmission dynamics of the etiological agent of SARS in Hong Kong: Impact of public health interventions, *Science* 20 Jun 2003; 300(5627): 1961–66.
10. Ibid.
11. Lipsitch M, Cohen T, Cooper B, et al., Transmission dynamics and control of severe acute respiratory syndrome, *Science* 20 Jun 2003; 300(55627): 1966–70.
12. Anderson RM, May RM, *Infectious Diseases of Humans*. Oxford: Oxford University Press 1991, p. 70.
13. Ferguson NM, Galvani AP, Bush RM, Ecological and immunological determinants of influenza evolution, *Nature* 2003; 422: 428–33.
14. See endnote 9.
15. See endnote 9.
16. See endnote 9.
17. Galloway G, Scope of SARS outbreak understated, critics say, *The Globe and Mail* 29 May 2003, p. A1.
18. Leung GM, Hedley AJ, Ghani AC, et al., Case fatality rate in 1529 inpatients with severe acute respiratory syndrome (SARS) in Hong Kong, 2003 (under review).
19. So LKY, Lau ACW, Yam LYC, et al., Development of a standard treatment protocol for severe acute respiratory syndrome, *Lancet* 2003; 361: 1615–7.
20. Booth CM, Matukas LM, Tomlinson GA, et al., Clinical features and short-term outcomes of 144 patients with SARS in the Greater Toronto Area, *Journal of the American Medical Association* 4 Jun 2003; 289(21): 2801–9.
21. Personal communication, Dr. Allison McGeer, 30 May 2003.
22. The Harvard Team, *Improving Hong Kong's Health Care System: Why and For Whom?* Hong Kong: Government Printer 1999.
23. WD Scott and Co, *The Delivery of Medical Services in Hospitals: A Report for the Hong Kong Government*. Hong Kong: Government Printer 1985.
24. Hutzler C, Beijing missteps on virus show research failings, *Asian Wall Street Journal* 4 June 2003, p. A1.
25. Horton R, The new public health of risk and radical management, *Lancet* 1998; 352: 251–2.
26. Horton R, The new public health, *Lancet* 1998; 352: 904.
27. Reason J, Human errors: Models and management, *British Medical Journal* 2000; 320: 768–70.

CHAPTER 6

1. Gro Harlem Brundtland, Day One Conclusion — The response so far, Speech by the Director General at the World Health Organisation global

- meeting on SARS, Kuala Lumpur, 17 June 2003, www.who.int/csr/SARS/conference/june_2003/materials/presentations/brundtland/en.
2. World Health Organisation, SARS — Status of the outbreak and lessons for the immediate future, May 2003, www.who.int/csr/media/SARS_wha.pdf.
 3. *People's Daily*, WHO officials study SARS situation in S. China province, 5 April 2003, www.english.peopledaily.com.cn/200304/05/eng20030405_114618.shtml.
 4. World Health Organization, SARS epidemiology to date, 11 April 2003, www.who.int/csr/SARS/epi2003_04_11/en.
 5. World Health Organisation, Update 49 — SARS case fatality ratio, incubation period, 7 May 2003, www.who.int/csr/SARSarchive/2003_05_07a/en.
 6. Karen Richardson and Betsy McKay, WHO's methodology may understate SARS death rate, some officials say, *The Wall Street Journal*, 22 April 2003, www.aegis.com/news/wsj/2003/WJ030410.html.
 7. Hong Kong SAR Government Press Release, www.info.gov.hk/gia/general/200304/26/0426132.htm.
 8. Hong Kong SAR Government Press Release, www.info.gov.hk/gia/general/200304/19/0419180.htm.
 9. Oliver Razum, Heiko Becher, Annette Kapaun, Thomas Junghans, SARS, lay epidemiology, and fear, *Lancet* 17 May 2003.
 10. In contrast, the change in the ICU/hospital ratio at the end is less significant as the number of patients in hospital is a lot lower.
 11. S. Riley, C. Fraser, C.A. Donnelly, et al., Transmission dynamics of the etiological agent of SARS in Hong Kong: Impact of public health interventions, *Science* 23 May 2003, www.sciencemag.org/cgi/rapidpdf/1086478v1.pdf.
 12. C. Dye and N. Gay, Modeling the SARS epidemic, *Science* 20 June 2003, www.sciencemag.org/cgi/reprint/300/5627/1884.pdf.
 13. World Health Organisation, Cumulative number of reported probable cases of SARS, www.who.int/csr/SARS/country/2003_07_11/en; Data from the United States is not included, since only eight of the reported 75 SARS cases have been confirmed to be SARS by serology tests. See US Centers for Disease Control, Reported Suspect and Probable SARS Cases, by SARS-Associated Coronavirus (SARS-CoV) Serology, United States, 15 July 2003. Available at www.cdc.gov/ncidod/SARS/casecount.htm.
 14. Ministry of Health, People's Republic of China, www.moh.gov.cn/zghl/yqfb/index.htm.
 15. Loretta Yam, Lecture on SARS-related issues given at Hong Kong Science Museum on 7 June 2003, t.hk/~avwork/MyDir/Archive/Archive/OUDEPA/SARS/SARS01_070603.ram.
 16. *Ibid.*
 17. See Chapter 7.

CHAPTER 7

1. Certain sections of this chapter are reprinted with permission from Elsevier from the article entitled “Possible role of an animal vector in the SARS outbreak at Amoy Gardens” by Dr. Stephen Ng (*Lancet* 2003; 362: 570–2).
2. All chronology is based on data obtained from the Department of Health on 4 April 2003. Subsequent more up-to-date data are not available at the time of the writing of this chapter.
3. Department of Health, Hong Kong Government, *Outbreak of Severe Acute Respiratory Syndrome (SARS) at Amoy Gardens, Kowloon Bay, Hong Kong, Main Findings of the Investigation*, 2003.
4. *Ming Pao* (Hong Kong), 27 March 2003.
5. *Ming Pao* (Hong Kong), 11 April 2003.
6. *Ming Pao* (Hong Kong), 5 May 2003.
7. *Ibid.*
8. See endnote 3.
9. World Health Organisation Laboratory Network, First data on stability and resistance of SARS coronavirus, www.who.int/csr/sars/survival_2003_05-04/en/.
10. Lipsitch M, Cohen T, Cooper B, et al., Transmission dynamics and control of severe acute respiratory syndrome, *Science* 20 June 2003; 300(5627) 1966–70.
11. *Ibid.*
12. Due to incomplete data, the epidemic curves are constructed using 187 confirmed SARS cases instead of the 267 cases that were reported at the time.
13. Jacoby RO, Rat coronavirus, in *Viral and Mycoplasmal Infections of Laboratory Rodents: Effects on Biomedical Research*, edited by Bhatt PN, Jacoby RO, Morse AC III and New AE. Orlando: Academic Press 1986, pp. 625–38.
14. The University of Arizona Cooperative Extension, www.cals.arizona.edu/pubs/insects/az1280.pdf.
15. Professional Pest Management Association, www.pestworld.org/homeowners/spotlight/roof_black_ship_rat.asp.
16. *New York Times* (New York), 24 May 2003.
17. Peiris JSM, Chu CM, Cheng VCC, et al., Clinical progression and viral load in a community outbreak of coronavirus-associated SARS pneumonia: A prospective study, *Lancet* 2003; 361: 1767–72.
18. *Ming Pao* (Hong Kong), 8 May 2003.
19. *South China Morning Post* (Hong Kong), 28 May 2003.
20. Rota PA, Oberste MS, Monroe SS, et al., Characterization of a novel coronavirus associated with severe acute respiratory syndrome, *Science* 2003; 300: 1394–9.

21. Marra MA, Jones SJM, Astell CR, et al., The genome sequence of the SARS-associated coronavirus, *Science* 2003; 300: 1399–404.
22. Haijema BJ, Volders H, and Rottier PJM, Switching species tropism: An effective way to manipulate the feline coronavirus genome, *Journal of Virology* April 2003; 77: 4528–38.
23. Researchers from the US National Institute of Allergy and Infectious Disease have just reported that they had successfully inoculated mice with the SARS coronavirus (*Science* vol. 302, 10 October 2003). Mice showed no symptoms of disease despite active replication of virus in their bodies.

CHAPTER 8

1. Yash Ghai, *Hong Kong's New Constitutional Order* (Hong Kong: Hong Kong University Press 1997), pp. 113–184 discusses extensively the legal and constitutional theory of autonomy in Chinese law. However, in practice, the Central Peoples Government kept Hong Kong practically sealed off from access by the rest of the country, allowing limited tourism, and then only in authorised, vetted groups. Business trips had to be approved by central authorities, with the Hong Kong and Macau Affairs Office and the Central People's Government Liaison Office jealously guarding their respective authorising powers over Hong Kong-mainland exchanges. Contacts between Hong Kong and Shenzhen and Guangdong authorities were largely ceremonial, highly bureaucratic or unofficial, except for those focused mainly on cross-boundary policing issues. Contours of the Hong Kong-mainland relations between mid-1997 and mid-2003 are best discerned from the initiatives registered in the "One Country, Two Systems Research Institute" (see the list of research projects at www.octs.org.hk/e_page_research.htm), which urged various changes in the relationship. Compare to the Hong Kong government website under the listing "mainland of China and Hong Kong" (see for example "infrastructure coordination with the mainland" at info.gov.hk/topic_f.htm). The rigid lines of official communication and the negotiated dates and agenda of formal meetings highly restrained cooperation and coordination in the case of emergencies such as SARS. See endnote 5.
2. Keith Bradsher, "Hong Kong doctor's ordeal as SARS patient," *New York Times*, 25 April 2003; and Mary Ann Benitez's interview of Dr. Tom Buckley, acting director of the PWH intensive care unit from 12 to 22 March who alerted physicians worldwide to the severity of the atypical pneumonia outbreak while Hong Kong officials were denying its seriousness, in "Doctor overwhelmed after launching e-mail campaign," *South China Morning Post* 31 March 2003.
3. See Chapter 4; and Cannix Yau, "Too little, too late in battle to stop killer," *The Standard* 15 April 2003.

4. Patsy Moy and Marcal Joanitho, “Pneumonia prompts WHO health alert,” *Sunday Morning Post* 16 March 2003, lead story. Also see next endnote for repeated calls for calm.
5. Mary Ann Benitez and Leu Siew Ying, in “WHO accused of spreading panic as pneumonia numbers hit 83,” *South China Morning Post* 18 March 2003, p. 1, quote Guangdong Health Bureau official Feng Shaoming as saying “We will monitor the situation in Hong Kong very closely but as for any exchange or cooperation, we need to get approval (from the central government).”
6. See below for details of the Article 23 controversy.
7. The 2003–04 Budget Address, see especially pages 75–93, “Raising Revenue,” available at the Hong Kong Government website: www.budget.gov.hk/2003/eng/index.htm.
8. See statement of the Financial Secretary to the press on his reprimand. Available on the Hong Kong Government website at: www.info.gov.hk/gia/general/200303/15/0315217.htm. See also Margaret Ng, “The case against Antony Leung,” *South China Morning Post* 28 March 2003.
9. See *China Daily* 17 July 2003 where Ip is highly praised while Leung receives very different treatment. Available at: www1.chinadaily.com.cn/en/doc/2003-07/17/content_245828.htm. Contrast this dry recital with the AP report at: www.twincities.com/mld/twincities/news/world/6313397.htm and especially the *Shenzhen Daily’s* account at: www.szed.com/szdaily/20030718/ca437983.htm.
10. John Pomfret, “Chinese authorities ordered doctors in Beijing to hide SARS patients,” *Washington Post* 20 April 2003. Warnings by mainland officials not to assess the mainland government’s handling of SARS were reported in July, on the day following the gigantic protest over Article 23 legislation, which included proposed new restraints on media reportage of state secrets in Hong Kong. “Media and academics ‘gagged by officials’ over SARS,” *South China Morning Post* 2 July 2003.
11. Bates Gill and Andrew Thompson, “Why China’s health matters to the world,” *South China Morning Post* 16 April 2003.
12. Charges that the Hong Kong Government also tried to hide aspects of SARS or kept information away from the public appeared throughout the period. See, for example, Chow Chung-yan, “Police told not to cause panic by using masks,” *South China Morning Post* 31 March 2003; Matthew Lee, “Officials ‘played down’ killer virus,” *The Standard* 14 April 2003; and Philip Bowring, “What the outbreak reveals: Hong Kong at its worst,” *South China Morning Post* 7 May 2003. Bowring complained about the Hong Kong Government’s secrecy with basic data, and attributed it, in part, to the political structure that empowered cliques with information denied to the rest.
13. The first call for a 100,000 person turnout was reported 20 June in the *South China Morning Post* (Jimmy Cheung, “Rally against security law promoted

via postcards”). By 25 June, 100,000 were expected to attend (Ambrose Leung and Stella Lee, “Democrats prepare to begin 100-hour hunger strike,” *South China Morning Post*). The next day, after Tsang Yok-sing, Executive Councillor and head of the DAB, stated that “even if 200,000 attended the rally the government would not withdraw the bill.” This prompted Lee Cheuk-yan to call for 300,000 to 400,000 to attend, but no one predicted such a turnout. See “Cannix Yau, Massive protest urged on Article 23,” *The Standard* 26 June 2003. The highest forecast number appeared in Christine Loh, “Welcome to an unhappy Hong Kong, Premier Wen,” *South China Morning Post* 30 June 2003. Loh noted that “Estimates (for the turnout) range from 100,000 to even 250,000 people.” The title of Loh’s op-ed piece refers to the TBWA report, *Marketing Premium Brands in Asia*, that found Hong Kong people to be “the unhappiest in the region by a wide margin — and that was before the added depression brought on by SARS.” Victoria Button, “Hong Kong people saddest in region,” *South China Morning Post* 29 June 2003.

14. For accounts of the unrest in the 1920s see Chan Lau Kit-ching, *From Nothing to Nothing. The Chinese Communist Movement and Hong Kong 1921–1936* (Hong Kong: Hong Kong University Press 1999) pp. 53–77. Compare to Norman Miners, *Hong Kong Under Imperial Rule, 1912–1941* (Hong Kong: Oxford University Press, 1987), pp. 12–20. See Ian Scott, *Political Change and the Crisis of Legitimacy in Hong Kong* (Hong Kong: Oxford University Press, 1989), pp. 81–126, for an account and analysis of the 1966–67 disturbances.
15. Elaine Wu, “No arrests throughout orderly protest,” *South China Morning Post* 2 July 2003.
16. “Over-focus on politics to harm HK’s interests,” *China Daily, Hong Kong ed.* 16 July 2003, www.1.chinadaily.com.cn/en/doc/2003-07/16/content_245665.htm. Also, “Miscalculation of public opinion,” *China Daily, Hong Kong ed.* 10 July 2003, www1.chinadaily.com.cn/en/doc/2003-07/10/content_244251.htm.
17. Polly Hui, Linda Yeung and Gary Cheung, “100 schools decide to shut their doors, but the education minister remains adamant that there is no need for blanket closures,” *South China Morning Post* 27 March 2003.
18. The connection between the Aw case and Leung was made repeatedly in the press. For example, Stella Lee and Ravina Shamdasani, “Whether to prosecute is my business, says Elsie Leung,” *South China Morning Post* 17 July 2003; the lead editorial in the *South China Morning Post* 19 July 2003, “The prosecution test that must be passed”; and an op-ed piece in the same newspaper by Christine Loh, “A crisis we could have avoided,” 18 July 2003. For an account of the Aw case, see Albert H.Y. Chen, “Continuity and change in the legal system,” in *The Other Hong Kong Report 1998*, edited by Larry Chuen-ho Chow and Yiu-kwan Fan, Hong Kong: Chinese University Press 1998, pp. 46–47.

19. See the Hong Kong Fearbusters website for ages of everyone who died in Hong Kong at www.fearbuster.org.hk. Only one person under the age of 30 died: a 28-year-old.
20. The best account of these events was written by John Pomfret of the *Washington Post* from Beijing. See “China orders end to SARS coverup, officials begin belated campaign against disease” (19 April 2003); “Coverup spurs shakeup in Beijing” (21 April 2003); “China’s crisis has a political edge” (27 April 2003); “Outbreak gave China’s Hu an opening, president responded to pressure inside and outside country on SARS” (13 May 2003).
21. The Health Minister Zhang Wenkang and Beijing mayor Meng Xuehong were sacked on 20 April. By 26 April, Robert Chung’s POP polls were reporting that trust in the Hong Kong government had dropped while that for the mainland had soared. See “Beijing firings win our trust,” *The Standard* 26 April 2003. Fong Tak-ho, “Leaders get tough with local officials,” *South China Morning Post* 9 May 2003, reported 120 mainland officials had been sacked for bad performance during the SARS emergency.
22. Indications that the Article 23 legislation was in trouble in LegCo could be seen on 4 July 2003 on the front page of the *South China Morning Post*. The Post, running a headline “On Tuesday, 500,000 people marched against Article 23. Today, we ask our 60 legislators how they will vote . . . and whether events of the past week have affected their decision.” The article took up the whole front page with colour photos of each LegCo member and indications of how they stood on the vote slated to take place 9 July. On 6 July 2003 the *Sunday Morning Post* front page announced “Tung makes Article 23 concessions” but this was not enough to stop criticism, and not enough to satisfy Tien, who resigned late that night. See Fanny Fung, “Tung shelves bill,” *The Standard* 7 July 2003.
23. Under-employment is an economic term used to indicate that workers are working part-time but desire full time employment.
24. A study by the University of Hong Kong’s Centre for Suicide Research and Prevention, reported by Patsy Moy, “Depression fears as suicides soar,” *South China Morning Post* 8 September 2003.
25. Tung’s character traits and the trouble they caused for governance could be clearly seen within the first year of his regime. See Michael DeGolyer, “Civil Service” in *The Other Hong Kong Report 1998*, edited by Larry Chuen-ho Chow and Yiu-kwan Fan, Hong Kong: Chinese University Press 1998, pp. 73–114. These troubles were comprehensively analysed in the joint Civic Exchange-National Democratic Institute publication reviewing the accountability system, “Accountability without Democracy,” (September 2002) available at www.civic-exchange.org/n_pub_cont_j02.htm#january2002. See also the author’s “The First Five Years” (June 2002) a Hong Kong Transition Project report, and “Accountability and Article 23” (December 2002) at www.hkbu.edu.hk/~hktf/.

26. See endnote above. See also Michael DeGolyer, “Broken rules,” *The Standard* 4 September 2003, and the Hong Kong Government “organisation chart” (which breaks all the rules) at www.info.gov.hk/govcht_e.htm (see notes on this website especially).
27. Michael DeGolyer, “Legitimacy and leadership: Public attitudes in post-British Hong Kong,” in *Hong Kong in Transition*, edited by Robert Ash et al, London: RoutledgeCurzon 2003, pp. 125–146; Lo Shiu-hing, *Governing Hong Kong*, New York: Nova Science Publishers 2001; Ian Scott, “The disarticulation of Hong Kong’s post-handover political system,” in *Hong Kong Government and Politics*, edited by Sing Ming, Hong Kong: Oxford University Press 2003, pp. 663–94.
28. This self-observation has been reported in the press numerous times and also by interviewees of the author who prefer anonymity. These interviewees have interacted with the Chief Executive, some many times, during both formal and informal exchanges.
29. The Government’s Department of Health and the quasi-independent Hospital Authority have two separate inquiries underway.
30. This strategy is described by Lau Siu-kai, now head of Tung’s Central Policy Unit, in “Government and political change in the Hong Kong Special Administrative Region,” in *Hong Kong the Super Paradox*, edited by James C. Hsiung, New York: St. Martin’s Press 2000, pp. 35–57.
31. As evidenced by the more than 30 interventions in the property market, including Michael Suen’s famous nine steps actions in late 2002. Tung has also indicated many times he considers high wage levels part of why he considers Hong Kong “uncompetitive.” See, for example, his remarks in December 2002 at the Hong Kong General Chamber of Commerce annual business summit, at www.info.gov.hk/ce/speech/cesp.htm. Also see the Chief Executive Office website in general for copious examples of these views.
32. Joseph Lo and Jimmy Cheung, “Li Ka-shing proud of protesters,” *South China Morning Post* 22 August 2003.
33. Chris Patten’s memoir, *East and West* (London: Macmillan 1998) discusses these events in passing, but Jonathan Dimbleby, *The Last Governor* (London: Little, Brown, and Co. 1997) gives a blow by blow account.

CHAPTER 9

1. David Heymann, Executive Director, Communicable Diseases, WHO, from transcript of a conference call on 8 April 2003, CLSA Speaker Series, “SARS – Hype from reality,” published by *CLSA Emerging Markets*. See also Chris Taylor, “In China, it seems the ‘big one’ is yet to come,” *South China Morning Post* 11 May 2003, p. 4.
2. Henk Bekedam, WHO’s China Representative in Beijing, from transcript

- of a conference call on 29 April 2003, CLSA Speaker Series, “SARS in China — Where to from here?” published by *CLSA Emerging Markets*.
3. Carrie Chan and Mary Ann Benitez, “Mid-June hint on travel advisory,” *South China Morning Post* 22 May 2003, p. A1.
 4. HKSAR Government Press Release, www.info.gov.hk/gia/general/200304/02/0402260.htm.
 5. An “affected area” is defined by the WHO as a region at the first administrative level where the country is reporting local transmission of SARS, www.who.int/csr/sars/areas/2003_03_16/en.
 6. The criterion for 20 continuous days of no new cases being detected automatically determines when a place is SARS-free. The criterion is based on two incubation periods of ten days each.
 7. HKSAR Government Press Release, www.info.gov.hk/gia/general/200305/03/0503138.htm
 8. SARS Bulletin, Health, Welfare & Food Bureau, 7 May 2003, www.info.gov.hk/dh/diseases/ap/eng/bulletin0507.pdf. The criterion for the number of active cases not to exceed 60 was derived from the experience in Hanoi, where the number of cases topped at 63, according to the WHO’s David Heymann at a press conference in Hong Kong at the Foreign Correspondents’ Club on 19 June 2003.
 9. HKSAR Government Press Release, www.info.gov.hk/gia/general/200305/20/0520250.htm.
 10. The father, a 33-year-old man, and his nine-year-old son were admitted to hospital on 11 and 12 February respectively. The father died on 17 February while the son recovered. The mother of the family was admitted to hospital on 13 February and also recovered. The family had a second daughter who remained asymptomatic throughout.
 11. A doctor from the Hanoi French Hospital, which received the SARS patient, contacted the WHO’s Dr. Carlo Urbani to look at the case because it appeared highly unusual. Urbani doubted it was a case of influenza and was alarmed by the case. Together with other WHO officials, they persuaded the Vietnam Government to take action to prevent the spread of the strange disease.
 12. WHO’s global alert about SARS, www.who.int/csr/sars/archive/2003_03_12/en.
 13. Matt Pottinger, Elena Cherney, Gautam Nail and Michael Waldholz, “How a global effort identified SARS virus in a matter of weeks,” *The Wall Street Journal* 17 April 2003.
 14. WHO’s emergency travel advisory, www.who.int/csr/sars/archive/2003_03_15/en.
 15. Chris Taylor, “In China, it seems the ‘big one’ is yet to come,” *South China Morning Post* 11 May 2003, p. 4.

16. Rob Stein, "On the pulse: SARS has revealed the skills and limitations of the WHO disease hunters," *The Standard* 3 June 2003, p. A19.
17. Hui Li, "Atypical pneumonia: SARS in China," *CLSA Emerging Markets* 17 April 2003, p. 7.
18. WHO SARS Update: www.who.int/csr/sars/archives/2003_04_02/en/.
19. David Heymann, WHO, see endnote 1 for full reference.
20. Michael Backman, "SARS: A WHO-induced panic?" Commentary, *Far Eastern Economic Review*, 22 May 2003. Backman was in fact mistaken in stating that the WHO had issued a travel advisory for Vietnam and Hanoi, although the WHO did include Hanoi on its SARS "affected area" list on 16 March 2003.
21. The WHO, *The World Health Report 2000*, 21 June 2000. The rankings had been set aside after vigorous objections from a number of UN member states.
22. Yeoh Siew Hoon, "Who did the right thing by SARS and travel", interview with Dr. Max Hardiman, *TravelWeekly*, 23 May 2003, p. 16.
23. WHO SARS Update: www.who.int/csr/sars/archive/2003_04_29/en/.
24. WHO SARS Update: www.who.int/csr/sars/archive/2003_05_14/en/.
25. Thomas Crampton, "WHO assails China for faltering on SARS," *International Herald Tribune*, 3 June 2003.
26. WHO SARS Update: www.who.int/csr/don/2003_05_23/en/ and www.who.int/csr/don/2003_05_24/en/.
27. WHO SARS Update: www.who.int/csr/don/2003_05_26/en/.
28. WHO SARS Update: www.who.int/csr/don/2003_06_04/en/.
29. WHO SARS Update: www.who.int/csr/don/2003_06_13/en/.
30. Health Canada, *Learning from SARS: Renewal of Public Health in Canada*, October 2003, p. 40.
31. Jonathan Mirsky, "Containing SARS: The scandal over Taiwan," *International Herald Tribune*, 12 May 2003.
32. Ibid.
33. "Who will stand up for Taiwan?" *Taipei Times*, 17 May 2003, p. 9. Taiwan was invited to attend a technical briefing on SARS however and was allocated time to make a short report on the development of SARS in Taiwan, see Melody Chen and Wang Ping-yu, Taiwan makes progress at WHO, *Taipei Times* 19 May 2003, p. 1.
34. Lin Chieh-yu, "WHO campaign stays on track," *Taipei Times*, 19 May 2003, p. 2.
35. Melody Chen, "Invitation from WHO reeks of politics," *Taipei Times*, 14 June 2003, p. 1.
36. Editorial, *Asian Wall Street Journal*, 31 March 2003. Long's statement was made on 27 March 2003.
37. Henk Bekedam, WHO, see endnote 2 for full reference.

38. Statement from the Standing Committee of the Politburo read on Chinese TV on 17 April 2003.
39. Meng Xuenong was appointed as the Deputy Director of the North-South Water Diversion Office on 1 October 2003.
40. John Aglionby, “China opens door to world help with its SARS crisis,” *The Guardian*, www.guardian.co.uk/sars/story/0,13036,946201,00.html, 30 April 2003.
41. Staff reporter, “Deadly ‘cover-up,’” *The Standard* 19 June 2003, p. B20.
42. John Pomfret, “China’s slow reaction to fast-moving illness fearing loss of control, Beijing stonewalled,” *Washington Post Foreign Service* 3 April 2003.
43. *People’s Daily*, english.peopledaily.com.cn/200304/05/print20030405_114618.html. What is unclear from available reports is whether the Guangdong Department of Health sent Xiao’s report or merely some information based on the report. Further, there are also discrepancies from published information as to when Guangdong issued the guidelines to hospitals informing them about the new disease. The *People’s Daily* reported the 23 January, whilst according to John Pomfret’s report (endnote 42), it could only have been after the 27 January since Xiao’s report was not supposed to have been read till then. The exact dates are perhaps unimportant since the fact is systemic secrecy within the Chinese system caused information to not be acted upon to China’s own detriment.
44. *Ibid.*
45. Josephine Ma and Staff Reporters, “Guangdong ‘reported on the outbreak in February,’” *South China Morning Post* 21 May 2003, p. A3.
46. Henk Bekedam, WHO, see endnote 2 for full reference, p. 3.
47. WHO SARS Update: www.who.int/csr/sars/archive/2003_04_09/en/.
48. *People’s Daily*, english.peopledaily.com.cn/200304/05/print20030405_114618.html
49. Bekedam, WHO, see endnote 2 for full reference.
50. Jonathan Mirsky, “How the Chinese spread SARS,” *The New York Review of Books* 29 May 2003, p. 42.
51. Matthew Lee, “Only Beijing to blame: Yeoh,” *The Standard* 14 June 2003, p. B5.
52. SARS Expert Committee report, *SARS in Hong Kong: From Experience to Action*, 2 October 2003, available online at www.sars-expertcom.gov.hk.
53. While protective gear was sent, no medical workers were dispatched. See HKSAR Government’s Press Release, www.info.gov.hk/gia/general/200305/08/0508110.htm
54. Christine Loh, “Love thy neighbour,” Hong Kong Strategy, *CLSA Emerging Markets*, March 2003, www.civic-exchange.org under publications 2003.
55. Bekedam, WHO, see endnote 2 for full reference.
56. The author is grateful to Su Liu of Wirthlin Worldwide for the use of her research on Shanghai.

57. Bekedam, WHO, see endnote 2 for full reference.
58. Jonathan Mirsky noted in “How the Chinese spread SARS,” *The New York Review of Books* 29 May 2003, page 42, that there was a 1996 law that classified “highest level infectious diseases” as “highly secret” with the secrecy extending from the first occurrence of the disease until the day it is announced. However, in checking the status of that law, Jerry Li of the United Nations Development Project’s (UNDP) office in Beijing advised that the Ministry of Health’s Legal Section told the UNDP that there was a Regulation on the Specific Scope of Secrecy of its Classification in Public Health Work but it had been invalidated in 2001, personal communication, 15 July 2003.
59. *Nanfang Rabao* 20 February 2003.
60. John Pomfret, “China’s crisis has a political edge,” *Washington Post Foreign Service* 27 April 2003, p. A33.
61. *Ibid.*
62. Matthew Forney, “China stops the presses, again,” *Time*, Asia Edition 30 June 2003.
63. HKSAR Government Press Release, www.info.gov.hk/gia/general/200307/07/0707200.htm, 7 July 2003.

CHAPTER 10

1. “China’s Chernobyl,” *The Economist*, 26 April 2003, pp. 9–10.
2. James C F Wang, *Contemporary Chinese Politics: An Introduction*, 7th Edition, Upper Saddle River, N. J.: Prentice Hall, 2002, p. 70.
3. The Central Secretariat has seven major departments: propaganda, organization, united front work, liaison office with overseas Chinese bodies, publication office of the *People’s Daily*, policy research, and the office of the party school.
4. Kenneth Liberthal, *Governing China: From Revolution Through Reform*, New York: W.W. Norton & Company Inc, 1995, pp. 169–170.
5. *Ibid.*, pp. 170–171.
6. Ellen Lee, “Officials from HK to Visit Hospitals in Guangdong,” *South China Morning Post* 1 April 2003, p. A2.
7. “Whose security? — “State security” in China’s new criminal code, *Human Rights in China and Human Rights Watch/Asia*, Vol. 9, No. 4, April 1997, pp. 21–25.
8. “China wakes up,” *The Economist* 26 April 2003, p. 19.
9. See Chapter 9 for more details.
10. WHO Updates, www.who.int/csr/sars/archives/2003_03_26a/en/, 26 March 2003. For this chapter, we have used the WHO figures rather than those of China’s Ministry of Health or those reported by the media as there are discrepancies.

11. WHO Updates, www.who.int/csr/sars/archives/2003_03_27b/en/, 27 March 2003.
12. WHO Updates, www.who.int/csr/sars/archives/2003_03_28/en/, 28 March 2003; and Hugo Restall, “Examining Asian: Keep Up the Pressure on China,” *Asian Wall Street Journal* 4 April 2003.
13. WHO Updates, www.who.int/csr/sars/archives/2003_03_31/en/, 31 March 2003.
14. WHO Updates, www.who.int/csr/sars/archives/2003_02_02b/en/, 2 April 2003.
15. WHO Updates, www.who.int/csr/sars/archives/2003_04_03/en/, 3 April 2003.
16. WHO Updates, www.who.int/csr/sars/archives/2003_04_04/en/, 4 April 2003.
17. WHO Updates, www.who.int/csr/sars/archives/2003_04_07/en/, 7 April 2003.
18. For details see Chapters 9 and 14.
19. Henk Bekedam, “SARS in China: Where to from here?,” Transcript of a conference call from Beijing, CLSA Speaker Series, 29 April 2003, *CLSA Emerging Markets*.
20. Siew-ying Leu and Bill Savadove, “Who says mainland officials continue to hinder investigation,” *South China Morning Post* 1 April 2003, p. A1; and Peter Wonacott and Susan V Lawrence and Matt Pottinger, “Health officials express doubt about China’s SARS figures,” *Wall Street Journal* 17 April 2003.
21. “Worldwide criticism of outbreak cover-up,” *South China Morning Post* 18 April 2003, p. A3.
22. “Taiwanese urged to avoid mainland as 13th case is revealed,” *South China Morning Post* 31 March, 2003, p. A5.
23. WHO Updates, www.who.int/crs/sars/archives/2003_04_18/en/, 18 April 2003.
24. Various news reports indicated that 100–200 officials have been fired throughout the country. Private communication indicated that as many as 500 have been dismissed.
25. WHO Updates, www.who.int/crs/sars/archives/2003_04_21/en/, 21 April 2003.
26. “The fund will be used to finance the treatment of farmers and poor urban residents infected by SARS and to upgrade country-level hospitals and purchase SARS-related medical facilities in Central and Western China and for research programmes on the virus,” China Creates SARS Task Force, Special Fund, Ministry of Foreign Affairs of the People’s Republic of China, 24 April 2003, www.fmprc.gov.cn/eng/47496.html. News reports indicated that some areas did not follow the central authorities’ order that poor people would be given free medical care; see John Pomfret, “SARS Spread in Rural China Raises Concerns,” *Washington Post Foreign Service* 7 May 2003.
27. Ibid.
28. “Jun Yi Jin Zhu Xiaotangshan” (Military surgeons stationed in Xiaotangshan Hospital), *Ming Pao* 1 May 2003, p. A18.
29. Fred Hu, “Will SARS derail China’s economy?,” *China Insight*, Goldman Sachs, 25 April 2003.

30. National Bureau of Statistics of China, www.stats.gov.cn/tjfx/jdfx/1200307170031.htm, 17 July 2003.
31. “WHO experts praise SARS hospital on Beijing’s outskirts,” *Xinhuanet* 4 June 2003.
32. Brad Adams, “China’s other health cover-up,” *Asian Wall Street Journal* 12 June 2003
33. “Jie Zhong Guo Yin Man yi Qing Yi Sheng Jiang Yan Yong Zao Jian Kong” (Dr. Jiang Yanyong, who revealed SARS cover-up was under surveillance), *Asia Times Online*, <http://asiatimes-chinese.com/514chsars.htm> 14 May 2003.
34. Eric Sautede, “The snares of modernity: Internet, information and the SARS crisis in China,” *China Perspectives*, No. 47, May-June 2003, p. 25.
35. Xia Liping, “China: A responsible great power,” *Journal of Contemporary China* 2001, p. 17.
36. Joint State of the Special ASEAN-China Leaders Meeting on SARS, Ministry of Foreign Affairs of the People’s Republic of China, 29 April 2003. In respect of the pledge, it was interesting that none of the ASEAN nation pledged money to the fund. It indicated that ASEAN did not think money was the issue.
37. CNN.com/World, “China promises openness on SARS,” www.edition.cnn.com/2003/WORLD/asiapcf/06/28/sars.apec/reut/index.html, 28 June 2003.
38. Judith Banister, “Population, public health and the environment in China,” in *Managing The Chinese Environment*, edited by Richard Louis Edmonds, Oxford: Oxford University Press, 1998, pp. 262–91.
39. “China: ‘One in 3 Chinese kids suffers from lead poisoning’,” *Straits Times*, 8 April 2003.
40. Dexter Roberts, “Breakdown: How China’s decentralized health care is failing,” *Business Week* 28 April 2003, pp. 22–23.
41. Ibid.
42. Chris Taylor, “In China, It seems the ‘Big One’ is yet to come,” *South China Morning Post* 11 May 2003, p. A4.
43. Christopher Bodeen, “China bans wildlife cuisine on SARS fears,” *Associated Press* 31 May 2003.
44. Dexter Roberts, “Breakdown: How China’s decentralized health care is failing,” *Business Week* 28 April 2003, p. 22.
45. Ibid.
46. “Foreign direct investment increased steadily. In 2002, the contracted foreign capitals through foreign direct investment stood at 82.8 billion US dollars, up 19.6 percent, and the foreign capitals actually utilized were 52.7 billion US dollars, up 12.5 percent,” “Statistical Communique 2002,” National Bureau of Statistics, People’s Republic of China, www.stat.gov.cn/english/newrelease/statisticalreports/1200303120088.htm, 28 February 2003.

47. Minxin Pei, “China’s governance crisis,” *Foreign Affairs*, September/October 2002, p. 97.
48. Joseph Kahn, “Beijing effectively beats SARS: WHO declares,” *New York Times* 26 June 2003.
49. “No watchdog,” *Asian Wall Street Journal* 9 August 2001, p. 6.
50. Wu Zhong and agencies, “70 dead in China’s ‘first sub accident’,” *South China Morning Post*, p. A1.

CHAPTER 11

1. Trade Shipping Industries Fisheries Agriculture Land, Hong Kong Administrative Report 1910.
2. Hong Kong Administrative Report 1934.
3. Hansard: The Financial Secretary, The Appropriation Bill, 1 March 1972.
4. *Ibid.*
5. *Ibid.*
6. World Trade Organization Agreement 1994.
7. The Federation of Hong Kong Industries and The Hong Kong Centre for Economic Research, *Made in PRD*, June 2003.
8. *Ibid.*
9. *Ibid.*
10. Gross Domestic Product 2002, HKSAR Government.
11. Corporation of the City of London, *The London/New York Study*, June 2000.
12. Corporation of the City of London, *The London/New York Study*, June 2000; US Census Bureau, 2000; and Census 2000; and HKSAR Government.
13. Annual Digest of Statistics 1990, HKSAR Government.
14. Gross Domestic Product 2002, HKSAR Government.
15. Corporation of City of London, *The London/New York Study*, June 2002.
16. Gross Domestic Product 2002, HKSAR Government.
17. Greater London Authority Housing in London, 2003; Rating and Valuation Department Report, Hong Kong 2003; New York City Rent Guidelines Board 2003 report; and New York Housing Supply Report 2003.
18. Grubb and Ellis, *New York Special Report 2001*; and Corporation of City of London, *London/New York Study*, June 2000.
19. ACI Traffic Data: World airports ranking by total cargo – 2002. Memphis, the major US domestic hub, is the world’s busiest cargo airport having lifted almost 3.4 million metric tonnes of freight in 2002. Hong Kong is the world’s second largest air cargo hub, carrying 2.5 million metric tonnes in 2002. Hong Kong, however, only carries freight internationally.
20. The Mayor’s of London Report 2003, *Visit London*; and NYC & Co., the official body promoting tourism in New York City information available at: www.nycvisit.com/home/index.cfm

21. NYC & Co; and London Tourist Board and Convention Bureau, information available at: www.londontouristboard.co.uk.
22. Ibid.
23. Ibid.
24. World Travel and Tourism Council, *SARS has a Massive Impact on Travel & Tourism in Affected Destinations*, 15 March 2003.
25. The Hong Kong Government relies for approximately 40% of its income from various real estate-related sources, principally from selling development rights as it continues to own all the land in Hong Kong. The decline in property prices dramatically reduced revenue at the same time that it was appropriate to run expansionary fiscal policies. This has resulted in a budget deficit that is about 5% in the year 2003/04. However, the total reserves of the HKSAR is probably of the order of US\$100 billion (HK\$776.8 billion), excluding reserves dedicated to supporting the linked exchange rate mechanism, which total US\$80 billion (HK\$621.4 billion).
26. Page 2, of the Preface to the Annual General Report for 1925 prepared by the Governor.

CHAPTER 12

1. The Hospital Authority's "probable SARS case" definition requires an X-ray with evidence of pneumonia, a fever and two of the following four symptoms: chills, cough, myalgia and/or exposure to a SARS patient. The WHO's "probable SARS case" definition requires a fever, cough or breathing difficulty and contact with SARS patient, or travel to or residence in a SARS-affected area.
2. WHO SARS Update, www.who.int/csr/sars/archives/2003_05_12/en/, 12 May 2003.
3. Danylo Hawaleshka, "Is this your best defense?" *Maclean's* 14 April 2003.
4. WHO Press Release, "Malaria is alive and well and killing more than 3,000 African children," www.who.int/mediacentre/releases/2003/pr33/en/, 25 April 2003.
5. Carolina Uribe and Victor Rodriguez, "Pues Yo Me Vuelvo a Hong Kong" [Well, I'm returning to Hong Kong], *El Mundo Cronica*, www.el-mundo.es/cronica/2003/393/1051447606.html, 27 April 2003.
6. Warren Kinsella, "The racist face of SARS," *Maclean's* 14 April 2003; see also Jan Wong, "How SARS has become the latest yellow peril," *The Globe and Mail*, www.globeandmail.com/servlet/story/RTGAM.20030411.cowong0411/BNStory, 11 April 2003.
7. David Baltimore, "Take a balanced approach to SARS," *Asian Wall Street Journal*, 29 April 2003.
8. WHO SARS Updates, www.who.int/csr/sars/archive/2003_03_24/en/, 24

March 2003 and www.who.int/csr/sars/archive/2003_03_25/en/, 25 March 2004.

9. The many stories of business lost by Hong Kong companies, particularly in the travel and tourism sectors, led to accusations that the WHO was insensitive to the economic consequences of its travel recommendations. To show that the WHO had overreacted, business people pointed to other illnesses, including the common flu, that every year kill more people than SARS. Public health professionals around the world, on the other hand, stressed the necessity of travel advisories from a public health perspective, especially given the novelty of the SARS virus, its unknown potential and the fact that it was spreading quickly via air travel. The travel advisories, although designed to warn people travelling to Hong Kong or Guangdong, also affected Hong Kong business overseas because people from SARS-affected areas were seen as potential carriers of the virus. Two major US and Swiss luxury goods trade fairs banned Hong Kong business people from participating for this reason. Immediately prior to the commencement of the Basel World Watch and Jewellery Show, Swiss officials told Hong Kong representatives that they could not participate in the Fair as exhibitors but could still be admitted as visitors. HKSAR Government officials intervened without success. A similar event occurred involving a jewellery show in Las Vegas, but intervention there did help to reverse the decision.
10. Leslie Chang, "China's petri dish to the world," *Asian Wall Street Journal* 2 April 2003.
11. Sarah Schafer and Fred Guterl, "How to make a virus," *Newsweek* 21 April 2003.
12. Elisabeth Rosenthal, "SARS forces Beijing to fight an old but unsanitary habit," *New York Times* 28 May 2003.
13. One direct consequence of the outbreak was the massive clean-ups in Hong Kong and in mainland Chinese cities.
14. Arnaud Bédard, "Dans la Cité de Tous les Dangers [In the city of all danger]," *L'illustré*, www.illustre.ch/2003/18/pro_1.html, 30 April 2003.
15. Alan Fung, "How Singapore outmanaged the others," *Asia Times*, www.atimes.com/atimes/China/ED09Ad03.html, 9 April 2003.
16. Keith Bradsher of the *New York Times* raised the point at the Panel Discussion: "Rebuilding Asia's World City" at the Hong Kong Foreign Correspondents' Club, 20 June 2003.
17. "Pro-government camp criticises the Government's PR handling of SARS," *Ming Pao* 5 May 2003.
18. HKSAR Government Press Release, www.info.gov.hk/gia/general/200304/13/0413193.htm, 12 April 2003.
19. Maggie Fox, "HK health-care system on the verge of collapse," *Indian Express*, www.expressindia.com/fullstory.php?newsid=2-471#compstory, 11 April 2003.

20. James Kong of the Hospital Authority's Health Informatics and Information Technology team developed "eSARS," Personal Communication, 21 July 2003. See also WHO SARS Update, www.who.int/csr/sarsarchive/2003_05_06/en/, 6 May 2003.
21. "Fearless and professional reporters in quarantine camps and SARS hotspots," *Ta Kung Pao* 14 June 2003, p. A09.
22. "SARS and the media," *Sing Tao Daily* 15 May 2003, p. E06.
23. *Media Digest*, "Conclusions of the Hong Kong media's handling of the SARS crisis," Radio Television Hong Kong, www.rthk.org.hk/mediadigest/20030515_76_79208.html, May 2003.
24. Sensational reporting prevailed in the early days of the crisis. See for example, "Killer pneumonia set panic in Hong Kong," *Oriental Daily news* headline 11 February 2003; and "Fatal pneumonia is spreading and is airborne," *Apple Daily* 11 February 2003 (front page headline). See also "Mutant flu outbreak – Truth behind fatal pneumonia," *Next Magazine* 13 February 2003, which portrayed the disease as one that affected less educated mainlanders.
25. Many Hong Kong newspapers and magazines frequently show nude pictures as well as enlarged images of victims who have died gory deaths. Detailed narratives in sex-related news stories are also quite common. The Hong Kong media is often under attack for the deterioration of social conduct and values. For more criticism of specific newspapers and magazines, see Yu Fu Kwok, "The 21st century network of sinners: A study of cases of violations committed by the local press," *The Candle Network*, The Society for Truth and Light, Issue 31 Vol. 6 No. 4, July 2003. For more on the local media's effect on Hong Kong society, see Yu Wing On, "The anti-intellectualism of the Hong Kong Media," *Media Digest*, RTHK, www.rthk.org.hk/mediadigest/20020315_76_17701.html, March 2002.
26. "Social responsibility," *Hong Kong Economic Times* 1 April 2003, p. C13.
27. The discussion took place on 26 April 2003 at the Fearbusters Workshop, see meeting record at www.fearbuster.org.hk.
28. "School of medicine dean: About 10 SARS infections in the community untold by officials; the Government was hiding infections, the Chinese University Shows," *Sing Tao Daily* 18 March 2003, p. A02.
29. "What have we learned from SARS?" *Ta Kung Pao* 26 June 2003, p. A26.
30. "Singapore closes all schools, but Hong Kong Government insists it is not for HK," *Apple Daily* 27 March 2003, headline.
31. Cheung Kwai-yeung, "The media has become the protector in the fight against SARS," *Wen Wei Pao* 28 May 2003, p. A11. The mainland-controlled media in Hong Kong adopted a more rigorous monitoring role after 17 April when fighting SARS and truthful reporting were identified as explicit priorities of China's national policy on SARS. *Tai Kung Pao* quoted Chinese

- president Hu Jintao, premier Wen Jiabao and state councillor Tang Jiaxuan in saying that the media's monitoring role and push for transparency improved many government policies on many occasions. See "Fearless and professional reporters in quarantine camps and SARS hotspots," *Ta Kung Pao* 14 June 2003, p. A09.
32. Richard Cullen, "The media and society in Hong Kong," in *Building Democracy: Creating Good Governance for Hong Kong*, edited by Christine Loh and Civic Exchange; Hong Kong: Hong Kong University Press 2003.
 33. See "SARS and the media," *Sing Tao Daily* 15 May 2003, p. E06.
 34. *Media Digest*, see endnote 23 for full reference.
 35. Albert Cheng took leave from 16 to 27 June 2003 after the Broadcasting Authority warned him for calling a government official "doglike" and criticising a Hospital Authority official without giving him enough time to defend himself on air. For further discussion on the influence of radio talk shows in Hong Kong politics, see Hannah Beech, "Making waves," *Time* 14 July 2003.
 36. The show was highly acclaimed for its role in protecting pregnant medical workers, a group which was particularly vulnerable to SARS.
 37. Critics focused on the Expert Committee's refusal to identify any maladministration, lack of diligence or negligence on the part of individual officials in handling the SARS epidemic. The SARS Expert Committee report, entitled *SARS in Hong Kong: From Experience to Action*, is available online at www.sars-expertcom.gov.hk.
 38. Bryan Walsh, "System failure," *Time Asia* 28 April 2003.
 39. Timeline, www.sosick.org/timeline.html, last update 16 June 2003.
 40. "Fearless and professional reporters in quarantine camps and SARS hotspots," *Ta Kung Pao* 14 June 2003, p. A09. See also "Sydney Chung praises the media for effectively monitoring the Government and encouraging medical workers," *Ming Pao* 15 May 2003, p. A08.
 41. Mary Lee Wing Ming, "The role and influence of the media in the SARS crisis," *Hong Kong Economic Journal* 12 June 2003, p. 25.
 42. Chris Sorensen, "Toronto safe to visit: Lastman assures CNN audience," *Toronto Star* 25 April 2003.
 43. On 29 April, after heavy lobbying by Canadian political heavyweights, the WHO lifted the travel advisory for Toronto, after which local media interest in SARS waned somewhat until the number of infections rose again and a second advisory had to be imposed on 26 May. Chapter 9 provides a fuller account of the politics involved in the WHO's unfortunate flip flop policy in the case of Toronto.
 44. Jan Wong of the *Globe and Mail*, personal communication, 18 July 2003.
 45. Anecdotal evidence indicated that Westerners living in Hong Kong had a lower incidence of wearing facemasks than their Chinese counterparts.

46. By contrast, Toronto's population density is 800 per square kilometre. See Population Density by Area, www.info.gov.hk/censtat/hkinf/population/pop5_index.html, Census & Statistics Department, 2003; and Population of 30 Metropolitan Areas in Canada, www.canadainfolink.ca/cities.htm, March 2003.
47. "Central Government fully supports SARS control efforts in HK: Hu Jintao," *People's Daily*, english.peopledaily.com.cn/200304/14/eng20030414_115104.shtml, 14 April 2003.
48. "HK's new SARS patients number under one digit per day," *People's Daily*, english.peopledaily.com.cn/200305/13/eng20030513_116587.shtml, 13 May 2003. However, as mainland controls on what the domestic media could report were relaxed slightly, there were many stories about the Amoy Gardens outbreak and the experience of residents. The suffering of the residents was recognised nationally when Premier Wen Jiabao took time to visit Amoy Gardens during a trip to Hong Kong on 30 June 2003. Wen also paid a visit to Kwok Sin-hung and his two young children at the neighbouring Lower Ngau Tau Kok Estate. Kwok lost his wife to SARS. Elaine Wu and Ambrose Leung, "For a devastated family, words of comfort," *South China Morning Post* 1 July 2003, front page.
49. The information was originally found at www.chinacdc.net.cn/feiyang/default.asp but the authors have not been able to access the information again subsequently.
50. "Transparency widespread, China opening wider," *People's Daily*, english.peopledaily.com.cn/200306/28/eng20030628_119023.shtml, 28 June 2003.
51. John Pomfret, "Doctor says Health Ministry lied about disease," *Washington Post Foreign Service* 10 April 2003; and Eric Sautede, "The snares of modernity: Internet, information and the SARS crisis in China," *China Perspectives*, Number 47, May-June 2003, p. 26.
52. Benjamin Kang Lim, "Chinese doctor gagged over SARS cover-up," Yahoo! News UK & Ireland, uk.news.yahoo.com/030522/80/e0lbn.html, 22 May 2003.
53. Staff Reporter, "Media and academics 'gagged by officials' over SARS," *South China Morning Post* 2 July, 2003.
54. See for example, Andrew Brown, *Killer Pneumonia*, CNN, aired 27 March 2003.
55. Indira Lakshmanan, "Exploring China's silence on SARS: New details surfaces on initial cover-up," *Boston Globe* 25 May 2003.
56. In May 2002, 10.3 million people crossed the Hong Kong-China border — an average of 343,000 people per day. In May 2003, the number dropped to 7.5 million people, an average of 250,000 per day.
57. "Chinese university professor: Pneumonia outbreak in Guangzhou did not cease," *Ming Pao* 24 March 2003.

58. Jesse Wong, "SARS shows dangers posed by Article 23," *Asian Wall Street Journal* 11 June 2003.
59. Joseph Man Chan, "Extending news monitoring to the mainland: Starting with SARS coverage," *Media Digest*, Radio Television Hong Kong, www.rthk.org.hk/mediadigest/20030616_76_84871.html, June 2003.
60. Michael Yahuda, *Hong Kong: China's Challenge*, London: Routledge 1996, p. 130.
61. Chris Yeung, "Separation and integration: Hong Kong-mainland relations in a flux," in *The First Tung Chee-hwa Administration — The First Five Years of the Hong Kong Administrative Region*, edited by Lau Kiu-kai. Hong Kong: Chinese University Press 2002, pp. 249–251.
62. Carrie Chan, "Encephalitis exposes system flaws," *South China Morning Post* 19 June 2003, p. A4.
63. *Media Watch*, Radio Television Hong Kong, aired 31 May 2003. The survey found that 88.8% of respondents thought they received sufficient information; 67.9% did not think they received too much information; 63.9% thought the coverage or information was accurate; 37.4% thought the coverage tended to be on the positive side while 30.5% thought it was on the negative side; and 63.8% thought the media had done a good job monitoring the government.
64. *Ibid.* Also see "The atypical military reporter," *Hong Kong Economic Journal* 28 March 2003, p. 13.
65. The HKSAR Government announced on 7 July that it would defer the legislation after the Liberal Party chairman resigned from the Executive Council the day before, which meant that the government would not carry the vote in the Legislative Council if it pushed ahead on the 9 July.
66. Chris Yeung, "The media and politics: A balancing act," *Sunday Morning Post* 13 July 2003, p. 10.

CHAPTER 13

1. SARS Expert Committee, *SARS in Hong Kong: From Experience to Action*, pp. 71–74, available online at www.sars-expertcom.gov.hk.
2. Keith Bradsher, "A deadly virus on its mind, Hong Kong covers its face," *New York Times* 31 March 2003.
3. Joe Havely, *Mystery Bug Sets Tongues Wagging*, CNN, aired 1 April 2003.
4. Throughout April and the first week of May 2003, the US Business Travel Coalition conducted four surveys of major buyers of commercial air transportation, Fortune 500 Corporations and other companies. On 1 April, 27% of those surveyed barred corporate travel to Asia; by the time of the 7 April survey, it had increased to 58%, on 16 April to 61% and on 6 May to 59%. As of 6 May, the largest restrictions were 96% to mainland China, 93%

- to Hong Kong, 81% to Singapore and 33% to Toronto. 96% of the respondents feared catching SARS; 59% said employees returning from Asia had to go through long period of quarantine; and 100% said they would only travel to Asia again after the WHO lifted the travel advisory.
5. David Pang of the Hong Kong Airport Authority, Personal Communication, 12 June 2003.
 6. Joseph Tung of the Travel Industry Council, Personal Communication, 24 May 2003.
 7. Alison Langley, "Fear of respiratory disease stymies Swiss jewelry fair," as printed in the *International Herald Tribune* 10 April 2003, p. 15.
 8. Pupils Sent Into Quarantine, BBC News, www.news.bbc.co.uk/1/hi/education/2957951.stm, 18 April 2003.
 9. Ella Lee, Michael Gibb and Agencies, "WHO rebukes US universities for SARS ban," *South China Morning Post* 10 May 2003, p. A1.
 10. Harry Doran and Tim Maitland, "Athletes Face Special Olympics Ban," *South China Morning Post*, 17 May 2003, p. A3.
 11. James Lu of the Hong Kong Hotels Association, Personal Communication, 24 May 2003.
 12. Steve Friess, "In Hong Kong, SARS fears infect hearts and minds," *USA Today* 15 April 2003, p. D06.
 13. Ella Lee, "Waging war on an unknown enemy," *South China Morning Post* 26 March 2003, p. A11.
 14. The Chinese University of Hong Kong, *Fighting SARS: We Care, We Serve*, www.cuhk.edu.hk/sars/, June 2003.
 15. Dr. York Chow, "What's going on, and what shall we do?" Internal Memo for Medical Colleagues, 13 April 2003.
 16. The Chinese University of Hong Kong, *Fighting SARS: We Care, We Serve*, www.cuhk.edu.hk/sars/, June 2003.
 17. See endnote 15.
 18. Mary Ann Benitez, "SARS heroes denied top honour," *South China Morning Post* 1 July 2003, page C16.
 19. Shaoni Bhattacharya and Debora MacKenzie, "Exotic animals likely source of SARS," *New Scientist*, www.newscientist.com/hottopics/sars/article.jsp?id=99993763&sub=News%20update, 23 May 2003.
 20. Hong Kong Government Press Release, www.info.gov.hk/gia/general/200307/19/0719079/htm, 19 July 2003.
 21. www.register.scmp.com/projects/field/acknowledgements.html
 22. Indira A R Lakshmanan, "Exploring China's silence on SARS: New details surface on initial cover-up," *Boston Globe* 25 May 2003.
 23. Anna Healy Fenton, "My husband should not have died like this," *South China Morning Post* 10 June 2003, p. A16.

24. Teddy Ng, "SARS job complaints swamp watchdog," *The Standard* 29 July 2003, p. B3.
25. Patsy Moy, "SARS stigma puts control of disease at risk," *South China Morning Post* 29 July 2003, p. C1.
26. Niki Law, "Generous spirit thrives in a time of great need," *South China Morning Post* 19 May 2003.
27. Hong Kong Government Press Release, www.info.gov.hk/gia/general/200307/19/0719079/htm, 19 July 2003.
28. See www.alumni.cuhk.edu.hk/eng/wecare.
29. See www.sosick.org.
30. www.hku.hk/gened/withu/Frame3_contents.htm.
31. The lunch was attended by the two authors for this chapter and another person in the hotel sector.
32. www.hongkongunmasked.com is a collaboration between Civic Exchange and Lemon, both members of Fearbusters. Another site created as a response to SARS was BrightenHK www.brightenhk.org.hk, which as a collaboration between The Outstanding Young Persons' Association, Internet Professional Association, Better Hong Kong Foundation and World Trade Centres Association.
33. The various Fearbusters campaigns are described in their Newsletters, www.fearbuster.org.hk. This book is also a direct result of the campaign.
34. See www.operateunite.hkcss.org.hk.
35. See www.teamclean.gov.hk.
36. See www.info.gov.hk/gia/general/200305/29/0529228.htm.
37. See www.vision2047.org.hk. The Vision 2047 group's mission is to strengthen understanding of Hong Kong international role. They wrote a letter in April 2003 which was sent to all the members' contacts all around the world. Other business groups also posted the letter on their websites.
38. See www.hkgcc.org.hk/hkcomesback.
39. See www.britcham.com and www.amcham.org.hk.
40. Jonathan Sharp, "SARS wars: Cathay fight back," *Hong Kong Business* July 2003, pp. 64–66.
41. James Hughes-Hallett, Chairman of Cathay Pacific Airways, *Flying Through Turbulent Skies*, speech to the Aerospace Forum Asia Industry Luncheon, 21 May 2003.
42. Hong Kong 2003, exhibition catalogue, Fong & Yeung Studio, 2003.
43. See www.sarsart.org.
44. Tom Hiditch, "The mask of sorrow," *Post Magazine*, *South China Morning Post* 8 June 2003, p. 10 & p. 12.
45. *Ibid.*, p.12.
46. *Ibid.*

47. Katherine Forestier, “Academics in a spin to contain the SARS fallout,” *South China Morning Post* 24 May 2003, p. W3.
48. Ella Lee, Michael Gibb and Agencies, “WHO rebukes US universities for SARS ban,” *South China Morning Post* 10 May 2003, front page.

CHAPTER 14

1. World Health Organization (WHO), *Severe acute respiratory syndrome (SARS): Status of the outbreak and lessons for the immediate future*, 20 May 2003.
2. Ibid.
3. SARS Expert Committee, *SARS in Hong Kong: From Experience to Action*, 2 October 2003, pp. 68–70, available online at www.sars-expertcom.gov.hk.
4. Mary Anne Benitez, “Taskforce was on alert pre-SARS,” *South China Morning Post* 6 June 2003, p. C6.
5. See endnote 3, p. 17, Figure 3.3.
6. Report of the Hospital Authority Review Panel on the SARS Outbreak, released by the Hospital Authority on 16 October 2003, pp. 17–18, paragraph 2.13.
7. Ibid, p. 17, paragraph 2.12.
8. Ibid, pp. 145–147, paragraphs 6.96, 6.97 and 6.102.
9. Ibid, p. 16, paragraph 2.8.
10. Ibid, p. 30, paragraph 3.8.
11. See endnote 3, pp. 87–90.
12. Ibid, pp. 87–88.
13. Ibid, p. 88.
14. Civic Exchange and the National Democratic Institute for International Affairs (NDI), *Accountability Without Democracy*, September 2002, p. 29 paragraph 7.6.
15. Ella Lee, “Hospital vetoed SARS ward closure,” *South China Morning Post* 31 July 2003, p. 1. The SARS Expert Committee noted that “the absence of a pre-determined hospital outbreak control plan and the inadequate involvement of [Department of Health] staff in critical decisions about outbreak control measures at PWH were not conducive to the management of the outbreak,” see *SARS in Hong Kong: From Experience to Action*, p. 71.
16. See endnote 6, p. 18, paragraphs 2.15–2.16.
17. Ibid, p.19, paragraph 2.20.
18. See endnote 3, p. 72.
19. Mary Ann Benitez, “The struggle to profile a killer,” *South China Morning Post* 25 June 2003, p. A14.
20. Ibid
21. See endnote 6, p. 16, paragraph 2.9.
22. See endnote 3, p. 74.

23. Ibid, p. 67.
24. Ibid.
25. Patsy Moy, “Leaders showed indifference towards outbreak, says panelist,” *South China Morning Post* 5 October 2003, front page.
26. For a useful discussion of the possible legal issues, see D K Srivastava and Richard Cullen, “SARS in the HKSAR: Some Important Legal Issues,” *Hong Kong Lawyer* July 2003, pp. 71–83.
27. Ravina Shamdasani, “Payout to 3 more medics’ families,” *South China Morning Post* 30 June 2003, p. C14.
28. The University of Hong Kong’s Public Opinion Programme conducted many surveys before and after 1 July 2003 that provide useful information on how members of the Hong Kong public felt about how they were being governed. See <http://hkupop.hku.hk>.

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Veronica Galbraith obtained her BA in Psychology from Huron University College at the University of Western Ontario, Canada. From 1998-2001 she managed tutors and students with Frontier College, a Canadian literacy organisation, as part of its London (Ontario) executive. She also worked at the Canadian Consulate in Hong Kong between 1999 and

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Anthony J Hedley has been Chair Professor of Community Medicine in the University of Hong Kong since 1988. He was formerly professor of public health in the University of Glasgow. His main research and public health advocacy interests in recent years have been in the field of environmental health, including outdoor and indoor air pollution, and the prevention of disease caused by tobacco. An important goal of the University of Hong Kong's Department of Community Medicine is to translate epidemiological research findings into public health policy.

Tai-Hing Lam graduated from the Faculty of Medicine of the University of Hong Kong in 1975 and obtained his MD degree there in 1988. He has been Chair Professor and Head of the Department of Community Medicine of the University of Hong Kong since 2000. His research spans the areas of epidemiology, occupational and environmental health, tobacco control, lifestyle factors, sexual and adolescent health, and molecular epidemiology.

Alexis Lau is an environmental scientist and Associate Director of the Center for Coastal and Atmospheric Research of the Hong Kong University of Science and Technology. A native of Hong Kong, Alexis graduated from the Chinese University of Hong Kong in 1984, got his PhD in Atmospheric and Oceanic Sciences from Princeton University in 1991, and returned to Hong Kong just before 1997. His specialty is in modelling and statistical data analysis for environmental and atmospheric sciences, with particular focus on air quality issues over Hong Kong and the Pearl River Delta. A true believer in the importance of explaining science to the public, he also works actively to promote science education in primary schools.

Edith MC Lau is a Professor in the Department of Community and Family Medicine in the Chinese University of Hong Kong. She is also the Deputy Director of the School of Public Health and the Director of the Jockey Club Center for Osteoporosis Care and Control in the Chinese University of Hong Kong. She is currently the President of the Hong Kong College

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Gabriel M Leung is currently Clinical Assistant Professor at the Department of Community Medicine of the University of Hong Kong. He is a key member of the SARS Epidemiology and Public Health Research Group, a collaboration between the University of Hong Kong and Imperial College, London. His research spans the areas of epidemiology, health services research, and health policy and economics. As a Fulbright Scholar, he graduated from Harvard University School of Public Health and received his undergraduate and postgraduate medical education at the Universities of Western Ontario and Toronto.

Christine Loh is Chief Executive Officer of Civic Exchange, an independent public policy think-tank. She holds a law degree from England and a Masters Degree in Chinese and Comparative Law from City University, Hong Kong. She also has been awarded the degree of Doctor of Law, *honoris causa*, from her alma mater, the University of Hull, England. In 1992, she was appointed to the Legislative Council. She gave up her business career in 1994 to become a full-time legislator and ran successfully in the 1995 and 1998 elections. She chose not to stand for re-election in 2000 to start Civic Exchange. Her work in public policy and promoting environmental protection and equal opportunity is well known. Loh writes extensively for local and international publications.

Stephen K.C. Ng graduated from the Faculty of Medicine, University of Hong Kong in 1972. He subsequently went to the United States and became a board-certified paediatrician in 1979. He obtained his Doctor of Public Health (Epidemiology) from the School of Public Health, Columbia University in 1986. Dr. Ng was a lecturer of Community Medicine at the University of Hong Kong between 1974-76. He was Professor of Paediatrics and Epidemiology at Columbia University between 1986-93 doing research in perinatal and cancer epidemiology before returning to Hong Kong in 1993. He is now Adjunct Associate Professor of Community Medicine at the Chinese University of Hong Kong as well as Special Lecturer in Epidemiology at Columbia University.

Alexandra A Seno is a freelance journalist and the Hong Kong correspondent for *Newsweek* magazine. As the granddaughter, daughter and sister of medical doctors, the SARS outbreak was a story that was personally important to her. Alexandra has covered Asian economics, politics, health and pop culture for over a decade, including seven and a half years at *Asiaweek* Magazine (a Time Inc. weekly publication based in Hong Kong). After receiving her Bachelor of Science undergraduate business law degree from the Ateneo de Manila University in the Philippines, she attended Xiamen University in Fujian for a year on a Chinese Education Ministry scholarship. Alexandra's work has also appeared in the *Washington Post* and the *International Herald Tribune*. She has lived in Hong Kong since 1994.

Jennifer Welker is editor of *TravelWeekly* China, a travel trade magazine published by a division of Reed Elsevier PLC. She also contributes to *TravelWeekly*'s sister publications for the Asia-Pacific region based in Hong Kong. Born in El Paso, Texas, she moved on soon after, and travelling became a very natural part of her life. At the age of 11, she moved to Hong Kong for two years and witnessed China just as it opened to the outside world in the early 1980s. She then realized Asia is where she wanted to spend the rest of her life. Upon graduation from the University of Missouri-Columbia's School of Journalism in 1993, she flew directly to Beijing where she spent three years in intensive Mandarin-language courses at the Beijing Capital Teacher's University. She has remained in Asia ever since.

YIP Yan-yan is a Researcher at Civic Exchange. She has assisted in Civic Exchange's various projects such as the Clean Environment Campaign and research on the Principal Officials Accountability System. She also took part in research for the HKSAR Government's Central Policy Unit on the Third Sector development in Hong Kong in 2002. She is now coordinating the Enhancing Democratic Participation Project at Civic Exchange and a project on how to sustain a cleaner environment at the Lower Ngau Tau Kok Estate post-SARS. Yip received her MSc in International Relations from the London School of Economics, UK.