

## CHAPTER FIVE

### DEALING WITH PUBLIC HEALTH CRISES AND PANDEMICS

The Chinese public health system during the Mao years was not only the first to create a near universal coverage system for rural dwellers but also an extremely successful force in controlling and reducing substantially communicable and infectious diseases. The system's ability to combine public health programs with mobilization campaigns without regard to cost proved very successful in reducing significantly endemic diseases such as schistosomiasis and cholera. The social control and public espousal of sexual puritanism that were features of CCP rule post-1949 also led to a dramatic reduction in the extensive commercial sex trade that was a feature of pre-1949 China, especially in a city such as Shanghai. However, since economic reforms began, the government's capacity to deal with such public health challenges has changed significantly. The breakdown of collective life has made it more difficult to conduct public education programs and to mobilize citizens in campaigns to eradicate disease vectors. These changes have led to a resurgence of certain diseases such as schistosomiasis. Social mores have changed and with people more mobile than at any time since 1949, there has been a revival of extensive commercial sex work and an increase in sexually transmitted diseases (STDs) and the emergence of HIV/AIDS as a threat.

China has been very successful in dealing with communicable and epidemic diseases, which by 1998 accounted for only 5 percent of fatalities, compared with 23 percent in India (Wolf et al.: 2003, p. 45). Although tuberculosis still claims around one-quarter of a million lives per year, given its level of economic development, China has dealt well with such health problems.<sup>1</sup> The key areas of health strategy such as public education campaigns and immunization programs have been affected by the health sector reforms discussed in Chapter Four. Continued progress in these areas relies on better community organization and government

engagement. Progress also requires effective intersectoral collaboration and an extensive surveillance system that can monitor disease outbreak and spread.

Morbidity and mortality rates for infectious diseases dropped consistently up until 1979. For example, malaria morbidity dropped 71.55 percent between 1965 and 1979, and mortality by 66.67 percent; typhoid and paratyphoid fever dropped by 33.9 and 66.7 percent respectively; and poliomyelitis by 86 percent and 87.5 percent respectively. The last attests to the effectiveness of immunization campaigns (Anson and Sun: 2005, p. 11). Data from the Shandong Department of Health in 1992 (*Public Health in China*: 2005) show that immunization rates fell by 36 percent from 1979 to the mid-1980s, and Gautam (1993, quoted in Anson and Sun: 2005, p. 18) notes that with the introduction of fee-for service, immunization coverage declined from close to full coverage to 60 percent for urban children and to 33 percent for rural children. However, renewed attention and special programs have increased the immunization rate. The immunization rate for measles, for example, rose from 78 percent in 1985 to 97 percent in 1990 and has now stabilized around 95–96 percent (Anson and Sun: 2005, p. 70). Ministry of Health statistics confirm this, with immunization rates for the most common incidences for children at around 98 percent in 2006.

Under reforms, progress in disease control has stagnated and in some cases has begun to reverse (table 5.1). The reported incidence of infectious diseases declined rapidly in the 1980s, from 872.33 per 100,000 in 1985 to 292.22 in 1990 and continued to decline to a low of 167.05 in 1996. Since then the incidence rate has increased, with a significant jump to 244.66 in 2004. The death rate per 100 patients was 0.22 in 2004, almost the same as in 1985 (0.23). Although diseases such as viral hepatitis and pulmonary tuberculosis remain the most prevalent (table 5.2), worryingly, sexually transmitted diseases have been increasing, from 12.32 per 100,000 in 1989 to 50.66 per 100,000 in 1998, with syphilis increasing from 0.17 to 4.31 (Chen et al.: 2000) and to 13.30 in 2006 (an annual increase of 30.7 percent, State Council AIDS Working Committee Office: 2007, p. 8).

In this chapter, we look at the policy challenges raised by two different diseases that reveal the “system’s strengths” and weaknesses in dealing with communicable diseases. First, we look at how the authorities dealt with the Severe Acute Respiratory Syndrome (SARS) that originated in China and spread worldwide. SARS brought home to the leaders the weaknesses in the health system, especially in the rural areas, which are discussed in Chapter Four. This has prompted them to improve the disease surveillance

**Table 5.1** Reported Incidence and Death Rate of Infectious Diseases for Selected Years

<i>Year</i>	<i>Incidence Per 100,000</i>	<i>Death Rate Per 100,000</i>	<i>Death Rate Per 100 Patients</i>
1985	872.33	2.00	0.23
1990	292.22	1.15	0.40
1995	176.24	0.34	0.19
1996	167.05	0.34	0.21
2000	197.63	0.26	0.14
2003	192.18	0.48	0.25
2004	244.66	0.55	0.22

*Source:* Ministry of Health, at <http://www.moh.gov.cn/open/2007tjts/P43.htm>.

**Table 5.2** Incidence Rate for Selected Contagious Diseases, 2006

<i>Disease</i>	<i>Incidence Rate Per 100,000</i>	<i>Death Rate Per 100,000</i>	<i>Death Rate Per 100 Patients</i>
Viral Hepatitis	102.09	0.10	0.10
Pulmonary Tuberculosis	86.23	0.26	0.30
Dysentery	32.36	0.01	0.03
Syphilis	12.80	0.01	0.05
Gonorrhoea	12.14	0.00	0.00
Malaria	4.60	0.00	0.06
AIDS	0.51	0.10	19.95

*Source:* Ministry of Health, at <http://www.moh.gov.cn/open/2007tjts/P43.htm>.

system, which is all the more important with the potential for the spread of avian flu (Saich: 2006). The spread of SARS also made the leadership aware of the potential economic impact that an outbreak of a major disease can have. Second, we look at the policy response to HIV/AIDS that has spread from discrete groups to the population at large. The development of policy to deal with the spread of HIV/AIDS reveals the progress that can be made once the importance of a particular issue is appreciated by the central leadership. However, it reveals the weakness of policy implementation by localities and how the government acting alone lacks the necessary capacity for an effective response. We conclude by drawing some general lessons about how effective the government is in providing the necessary infrastructure for public health and by looking at possible policy options.

### **Combating SARS: A Wake Up Call for China's Health System**

It must have come as a surprise to General Secretary Hu Jintao and Premier Wen Jiabao that their first major policy challenge came not from the economic realm but rather from the outbreak of SARS. Although some writers expressed optimism that the struggle to contain SARS might lead to significant changes, once Hu and Wen won their "war on SARS," dramatic change looked less likely and "old politics" began to reassert itself (this section is based on Saich: 2006). The CCP began to extol its virtues in taming the viral beast. The traditional propaganda system soon found its footing to portray the struggle in terms of patriotism and turned out little ditties, such as "Angels in White Coats," that paid homage to the nurses and doctors of China who, moved by love of the party and concern for the people, worked tirelessly to help the people. While this suggests that the effects of SARS on the system as a whole were minimal at best, it underestimates the impact that SARS had on thinking about healthcare and more generally about investment in the countryside. As we shall see in the following section, SARS had a significant effect in pushing forward policy on HIV/AIDS and in thinking about emergency response more generally.

The fact that it took from November 2002 until mid-April 2003 before the Chinese leadership took decisive action against SARS reveals certain problems with China's administrative and reporting systems. Obviously, attention was deflected by the leadership transition that was taking place during the same period. But also, the prevailing obsession with social stability and economic development meant that there was no incentive to release information about the disease for fear that it might cause panic or slow down economic growth through reduced consumption or investor flight. In fact, the poor handling of information flows led to panic buying as well as rioting and the destruction of quarantine centers.

The delay in response revealed strong bureaucratic disincentives to effective reporting. The Ministry of Health is a weak player institutionally and at the local levels it is subordinate to party organs. Thus, if local party leaders receive and transmit messages to downplay the disease, there is little that health officials can do. In addition, at the time, there was a lack of clarity about to whom to report and under what circumstances. In accordance with Chinese law, epidemics fall under the classification of state secrets; the localities do not have the power to make public comments about disease outbreaks before they have been announced by national-level authorities. There is no incentive for local officials to report bad news before they have a clear signal to do so. This encourages optimistic reporting and

the suppression of bad news. As discussed below, the interplay of these factors led to a delay in timely reporting and exacerbated the impact of the disease, causing precisely the kind of domestic and international crisis that the system wishes to prevent.

Although local researchers in Guangdong province denied that there had been unnecessary delays and that it is very difficult to detect a new virus, politics did intervene to ensure that knowledge was not shared widely enough. Throughout the spread of the disease, authorities at each level sought to deny that there was a problem until events forced them to admit otherwise. Even then, the first response was usually to assure the public that while there might have been a problem, this was no longer the case. It seems certain that Guangdong authorities knew about the disease by early January 2003 (for details, see Saich: 2006), but this news was suppressed, mainly to ensure that the Chinese New Year holiday at the end of the month would not be disrupted and consumer spending would not be curtailed. The limited press coverage that was allowed was designed to ridicule the idea that there was anything untoward happening and to make sure that there would be no public panic. The *Southern Daily* claimed that police had ordered operators of leading Web sites to carry only positive reports on dealing with the disease (*FEER*, April 10, 2003). Trying to keep a lid on things, on February 14, 2003, Guangdong party secretary Zhang Dejiang ordered provincial authorities to educate the public to “voluntarily uphold social stability, not believe in rumors, not spread rumors” and to focus on the objective of the Sixteenth Party Congress to build China into a moderately well-off society (*xiaokang shehui*).

While the provincial authorities were trying to calm public anxieties, it is clear that by early February officials in Beijing knew of the situation in Guangdong and the Ministry of Health (MOH) even sent a team headed by a vice minister to investigate. However, the Guangdong pattern of initial denial and then rejection of the disease's importance continued until April 20, 2003. The slow response may have derived from underestimation of its impact and the thought that it was localized in the south. However, even if more information had become available, no senior official was in a position to undertake action as they were preparing for the National People's Congress (NPC) meeting that was due to open on March 5. With the leadership transition about to be completed, media control was tighter than usual and any negative reporting would have been inconceivable. Thus, on March 9 officials from the MOH met with the heads of major Beijing hospitals to inform them about SARS but told them that this was not for public distribution and certainly should not be repeated to the media (Pomfret, *Washington Post*, May 13, 2003).

This delay because of the convocation of the NPC was fatal in terms of preventing the spread of the disease in the Chinese capital. On March 15, three days before the NPC closed, the World Health Organization issued its first global warning about SARS but the Propaganda Department instructed Chinese media not to report it. After the congress, things began to change but it took international pressure and domestic dissent to force China's leaders to act. It is likely that without the pressure from international organizations such as the WHO and the postponement or cancellation of high-profile events such as the World Economic Forum China Business Summit and the Rolling Stones concert, the leadership would not have changed its approach of assuring in public that all was under control while seeking internally to cut off the spread of the virus. Finally, it took the actions of a Chinese doctor to release information about the severity of the situation in Beijing to prompt action.

Even then, it was not until mid-April that policy really began to change. The new sense of urgency and the notion that a new approach had to be undertaken were confirmed at a key Politburo meeting on April 17. Effectively the meeting acknowledged that China had been lying and called on officials to report periodically to the public (daily reporting had begun on April 1), not to delay reporting, and not to cover up the situation. It also called for greater international and local cooperation and the exchange of experiences on limiting the disease. It linked combating SARS to the policy line of the party congress, calling on each party committee and government organization to recognize the extreme importance of SARS work. A new task force was set up under the Beijing Municipal Government to bring about better cooperation between the civilian and the military authorities. It was acknowledged that the fragmented jurisdiction over medical facilities in the capital meant that accurate information had not been collected. Unlike at Chinese New Year, it was now recognized that it was not a good idea to have tens of millions of people crossing the country for the seven-day May Day vacation, so it was cut to one day. Supervision teams were to be sent out to investigate the situation in key provinces and special concern was raised to prevent the disease from spreading into rural areas where the health system was liable to collapse. A special medical aid fund, with costs shared by central and lower-level governments, was set up to provide subsidies for those unable to cover costs.

Subsequently, it was revealed that the minister of health and the mayor of Beijing had been dismissed to take ministerial responsibility for failures. Vice Premier Wu Yi was placed in charge of the Ministry of Health and on April 23 a central command center headed by Wu was established with a budget of 2 billion yuan (*SCMP*, April 24, 2003).

Following this, a number of high-profile press conferences were given that admitted shortcomings and that pledged to make information more freely available. The energetic approach of Hu and Wen and the new appointments ushered in a brief period of unexpected cooperation and openness of reporting about SARS in the media. This not only helped warn the public of the dangers and allowed them to take sensible precautions, but also indicated to other officials that they had to take SARS work seriously or face punishment.

Importantly, for considering disease control in the future, this period of openness was short-lived and soon “politics as usual” was reestablished. The traditional propaganda system came to grips with the new demands. While the new campaign was geared to mobilizing people’s support for the struggle against SARS, it was accompanied by more familiar restrictions on reporting. Patriotic slogans were devised and traditional CCP language now took over. Although the language of Leninism is that of struggle, the language of the CCP is that of war, and sure enough on May 1, Hu Jintao declared that indeed China was engaged in a “people’s war” against SARS for which the “masses should be mobilized” (*Xinhua News Agency*, May 1, 2003). This recourse to traditional propaganda techniques and the tools of mass mobilization disillusioned many who thought that SARS might herald real change but they were effective in restoring party morale and dealing with the epidemic. Constraints on the media were soon put back in place and the limited openness around SARS did not spread to other areas. In fact, by mid-June the Propaganda Department was clearly worried that the relaxation might go too far and moved to censure some publications and called for all publications to stop reporting on sensitive topics (Pomfret, *Washington Post*, June 20, 2003). This included writing stories critical of how Guangdong handled SARS or reporting about the Chinese doctor who had brought the government cover-up to international and domestic attention. By the end of June, media outlets and academics had been warned not to analyze how the government had dealt with SARS. This attitude was in marked contrast with mid-May when a senior official from the Beijing Municipal Party Committee announced that “media have the right to expose any cover-up or false report on the epidemic situation” (*Zhongguo xinwenshe*, May 20, 2003, translated in FBIS-CHI-2003-0520).

This description of the politics of SARS is important as it reveals how policymakers are likely to respond when confronted by some kind of epidemiological crisis and it provides a number of general lessons for thinking about how Chinese leaders might deal with such occurrences in the future. After outlining the situation concerning HIV/AIDS in China, we shall draw together some of these general lessons.

### The Challenge of HIV/AIDS

The heightened awareness that SARS created about the weaknesses in the public health system and their potentially destabilizing effects was used by both domestic and international advocates to encourage China's leaders to pay more attention to the threats presented by the potential spread of HIV/AIDS. A major breakthrough occurred on World AIDS' Day in December 2003 when Premier Wen Jiabao and Vice Premier Wu Yi (both newly appointed), who had led the policy response to SARS, visited people living with HIV/AIDS at the Ditan Hospital in Beijing and announced the "Four Frees and One Care" policy.<sup>2</sup> Since then, a number of policy initiatives have been launched and China's most senior leaders have kept up the public visits, the most recent being the general secretary's meet and greet with HIV/AIDS patients on the 2007 World AIDS Day (*People's Daily*, December 1, 2007).<sup>3</sup>

It is clear that since Wen's visit, more serious policy attention has been paid to the threats posed by HIV/AIDS and the shift in central policy has been remarkable. Policy has moved from benign neglect to official acceptance and promotion of most international best practices. This is just as well as although infection rates are still low, cases have been reported in all provinces and recent trends show that the disease is developing a profile similar to that in other countries. Those infected are no longer in specific geographic regions and rather are members of the general population. The central government has recognized this fact and an institutional framework for dealing with HIV/AIDS has been set up and a number of policy initiatives have been promoted. However, implementation remains problematic as does promotion of the kind of multisectoral responses and engagement of civil society that have proved successful in dealing with the disease in other countries such as Thailand. Further, social trends such as the large influx of migrants and the more relaxed social mores make education, monitoring, and evaluation more difficult. Last but not least, it remains to be seen whether policy will be implemented responsibly by local governments. As stated in Chapter Three, the incentive system for local governments works against adequate resource allocations for preventive medical care and the promotion of health education.

At first glance, the figures for HIV/AIDS infections in China do not look alarming, certainly not when compared with Sub-Saharan Africa. In fact, the 2005 MOH, UNAIDS, and WHO joint study (MOH: 2006) lowered the previous official estimate by 22 percent, from 840,000 to 650,000 infected based on claims of a more effective data gathering system.<sup>4</sup> The study released in December 2007 made a slight upward adjustment to 700,000, with 80,000 said to be living with AIDS, and

fewer than 100,000 cumulative deaths (State Council AIDS Working Committee Office: 2007). These revised figures have been met with skepticism by some in the HIV/AIDS community, and other estimates run up to 1.5 million. Thus, although widespread, the infection has a low prevalence (0.05 percent), with concentration in a number of provinces. However, given the recent increased policy attention, the two reports and their sponsors were at pains to point out that this was no cause for complacency as there had been around 50,000 new infections in the first nine months of 2007 and 20,000 deaths. By late October 2007, a total of 223,501 HIV/AIDS cases had been reported, up from 183,733 by October 31, 2006 (Reuters, September 9, 2007). The number of new cases reported in the first half of 2007 was equal to the number of cases reported in the whole of 2006.

Cases have now been reported in all provinces and the trends confirm the spread beyond specific communities. The disease developed in three distinct categories that have begun to merge. The first is the category of intravenous drug users (IDU), who were initially concentrated in western provinces such as Yunnan and Xinjiang; the second is the category of infections among the former blood and plasma donors (FBD) in central provinces such as Henan; and the third is the category of transmissions through sexual activity with a higher concentration of commercial sex workers (CSW) in southern China (for more details on this, see Thompson: 2005). It is now clear that not only is transmission moving between IDUs and CSWs, with many drug users engaging in commercial sex to pay for drugs, but also spreading to the broader sexually active population. Assertive action now will help control rates closer to levels in Thailand (2–3 percent) rather than in South Africa (20 percent). The lower rate would still mean 25–30 million infections; Chinese officials want to keep the number of infections under 1.5 million by 2010 (State Council: 2006).

Problematically, China has a number of features that are conducive to the spread of HIV/AIDS. One of the adverse impacts of the family-planning policy as we saw in Chapter Three is the surplus of males and a population that is increasingly mobile and that will become more urbanized over the next decade. Also, Chinese people have low levels of awareness about the disease and how it is spread. For example, according to a 2004 survey conducted by the China Center for Disease Control and Prevention (CDC), over 80 percent of men who have sex with men (MSM) were “totally ignorant” about the risk of contracting HIV and “mistakenly believe they are safe from HIV/AIDS” (Kaiser Network: 2004). It should be kept in mind that in China, most MSM are married and their partners are unaware of their MSM activities. There is a rising

CSW community with an attendant rise in sexually transmitted diseases and low rate of condom use (see Yuan Yue: 2003). Condom use has been rising but it is still low. The rate for CSWs who never used condoms decreased from 37.4 percent in 2001 to 7.5 percent in 2006 and the rate of female CSWs who had used a condom every time during commercial sex during the previous month had risen from 14.7 percent to 41.4 percent in 2006. This still leaves 60 percent not using condoms regularly. Among MSMs, only 30 percent used a condom for anal sex and only 50 percent used one when engaged in commercial homosexual sex (State Council AIDS Working Committee: 2007, pp. 20, 8).

This suggests that the potential for rapid spread exists and also accounts for why some believe that China's official figures for HIV/AIDS underestimate the extent of the disease in China. Although the surveillance may have been improved, there remain low levels of knowledge about the disease within the health community and an unwillingness of individuals to admit having the infection because of social stigma. One survey reported that 40 percent of respondents shunned those living with HIV/AIDS (State Council AIDS Working Committee: 2007, p. 9). The situation in central China is indicative of the confusion around the numbers. The United Nations suggested that there were 55,000 commercial and plasma donors infected with HIV, whereas AIDS expert Zhang Ke reported that in 2004 the figure for Henan, the key province in central China, could be more than 170,000. Dr. Zhang estimated that a further 130,000 in Henan were infected from hospital transfusions (*Economist*, January 18, 2007). These higher claims for FBD are countered by the new assessments, and at the end of 2006 official figures claimed a total of only 35,232 reported HIV cases (*Xinhua* News Agency, July 10, 2007).

Whatever the truth of the figures, the infection rate is increasing sharply and the profile of the disease is beginning to look more like that in other parts of the world. In 2007, for the first time the number of total infections among the 700,000 HIV positives derived from heterosexual activity exceeded the number of intravenous drug users: 40.6 percent as opposed to 38.1 percent. The number of those infected from homosexual behavior was calculated at 11 percent. The number of IDU infections in the total has been falling progressively from 72.6 percent in the period from March 1985 to 2000 (Zhang Konglai: 2002, p. 306) and 44.3 percent in the 2005 survey. One survey found that 50.8 percent of drug addicts continued to share needles (*Xinhua* News Agency, November 24, 2006), while the 2007 survey estimates the number at 40 percent. Almost 90 percent of the current IDU infections are concentrated in seven provinces, with over 10,000 infections in each.<sup>5</sup> The figures also show the flow through the statistics of the infections of former blood and plasma

donors that were discovered in Henan and elsewhere in the mid-1990s at 10.7 percent of the total in 2005, up from 9.4 percent in 2003 (Han Mengjie: 2004) and at only 0.5 percent during the 1985–2000 period (Zhang Konglai: 2002, p. 306).<sup>6</sup> The percentage had dropped back to 9.3 percent in 2007. There were no reported new infections in this category in 2005 and 2007. As late as 2004, the MOH stated that it had closed down 150 illegal blood collection and supply agencies across the country (Kaiser Network: 2007). From January 1, 2008, all blood products were to be screened for HIV and other blood-borne diseases (*Xinhua* News Agency, September 12, 2007).

Importantly, in China more males are infected than females, the reverse of the situation in many other countries, but this is also beginning to change. Although Zhang Konglai (Zhang: 2002, p. 307) found a ratio of 5:1, the ratio has dropped rapidly to 2:1. As of the end of 2007, women accounted for 30.8 percent of all reported HIV/AIDS cases, up from 19.4 percent in 2000 and comprising over half of the infections contracted through sexual transmission (*Xinhua* News Agency, June 5, 2007; State Council AIDS Working Committee Office: 2007, p. 4). The ratio was as high as 9:1 in the early 1990s (Jolly and Wang: 2003, p. 4).<sup>7</sup> The infection rate is highest among those aged 20–39—with 70 percent in 2007. Those in the 15–20 age range claimed 5.9 percent of the infections (Ru: 2006). This argues for a stronger education program for the young.

The prevalence among IDUs has risen from 1.95 percent in 1996 to 6.48 percent in 2004 (Ministry of Health: 2005, p. 4). Not surprisingly, the number of IDUs is uncertain. Public Security statistics mention a population of 1 million, but others suggest a population of 5 to 6 million. Injection of drugs will remain the dominant mode of transmission in northwest and southwest China. A 2003 UNAIDS report estimated that in certain areas of Sichuan and Guangxi, HIV prevalence is 50 and 43 percent respectively, whereas in parts of Yunnan and Xinjiang it is reported to be 80 percent (Ministry of Health and UN Theme Groups: 2003, p. 10). Yili in Xinjiang is said to have a prevalence rate of 89 percent among IDUs (Thompson: 2005, p. 70). For the provinces of Xinjiang, Yunnan, and Sichuan, the overall rate was said to be over 50 percent in the 2005 Ministry of Health joint survey with the United Nations Programme on HIV/AIDS and WHO (MOH: 2006). Drug use is linked with commercial sex work, with clear evidence that female IDUs are more likely to engage in commercial sex to support their habit. In a survey of Sichuan, nearly 60 percent of female IDUs reported selling sex for money or drugs and less than 30 percent reported consistently using a condom with customers (Choi et al.: 2006). Choi and his

**Table 5.3** Source of HIV Infections (percent)

<i>Transmission Mode</i>	<i>2007 Survey</i>	<i>2005 Survey</i>	<i>2003</i>	<i>Zhang Konglai (1985–2000)</i>	<i>Infected in 2005</i>
Intravenous Drug Use	38.1	44.3	60.0	72.6	48.6
Former Blood and Plasma Donors	9.3	10.7	9.4	0.5	0.0
Sexual Transmission	51.6	43.6	8.4	6.8	49.8
CSW and Clients	—	(19.6)	—	—	—
Partners of HIV Positive Individuals	—	(16.7)	—	—	—
MSM Transmission	11.0	(7.3)	—	—	—
Mother-to-Child Transmission	1.0	1.4	—	—	1.6

*Notes:*

CSW—Commercial Sex Workers

MSM—Men who have Sex with Men

*Sources:*

2005 survey, MOH, UNAIDS, and WHO: 2006.

2003 figures from Han: 2004.

1985–2000 figures from Zhang Konglai: 2002.

colleagues found that the HIV infection rate among IDUs in Sichuan increased at an annual growth rate of 97.23 percent between 1991 and 2003 (table 5.3).

With the expansion of the sex trade in China there are anywhere between 1 and 6 million commercial sex workers, with one estimate at 20 million (Gill et al.: 2007, p. 14). As noted, although improving, condom use is low. The CSWs most likely to use condoms are those working in high-class hotels (56.7 percent), but this figure drops to 29.9 percent for those working in bath houses, massage parlors, and barber shops and then to only 15 to 20 percent for those working in establishments ranked below that (Parish and Pan: 2006, pp. 195–97). HIV prevalence among the CSW community has increased from 0.02 percent in 1996 to 0.93 percent in 2004 (Ministry of Health: 2006, p. 4). Again the rates vary significantly. In Shenzhen, it is said to be between 1 and 3 percent (interview with scholar, January 2004); whereas in some parts of Yunnan, Chongqing, Hunan, Guangdong, Guangxi, and Sichuan, the rate is said to be over 1 percent (MOH, UNAIDS, and WHO: 2006, p. 4). The highest documented prevalence rates among CSWs are estimated to be 10 percent in Guangxi, 5 percent in Yunnan, and 3 percent in Guangdong (Kaufman and Meyers: 2006, p. 51). Although migrants have received much attention from policymakers, evidence suggests that it is the more educated and more affluent who are most likely to visit

commercial sex workers. According to Pan Suiming (2001, p. 5), the wealthiest 5 percent of men are 33 times more likely to visit commercial sex workers than the poorest 40 percent of men. Also, managers, factory owners, and businessmen are ten times more likely to visit commercial sex workers than urban manual workers and 22 times more likely than male laborers in rural areas. This group, now referred to as mobile men with money, is the most likely bridge to bringing the disease to the general population.

STIs are increasing rapidly, with an officially acknowledged count of 703,001 in 2001, up from 5,800 in 1986; among this category, the infection rate has risen 55-fold from 0.02 percent in 1995 to 1.1 percent in 2000 (Han Mengjie: 2004; Gill et al.: 2007, p. 16). However, some estimate that the figure for STIs might represent only as little as 5 to 10 percent of the actual total as many of those infected prefer to visit private clinics because of the potential ramifications of visiting a public clinic (Thompson: 2005, p. 9). A 2001 survey alarmingly found that of 800 prostitutes interviewed in Sichuan and Yunnan, two in five had never had a health check-up, and over half did not consult doctors when they contracted sexually transmitted diseases (Yuan Yue: 2003).

These statistics table 5.3 provide the background for understanding the potential for the spread of HIV/AIDS and they have forced the government into action. The general lessons that have been drawn will be covered in the following section. Here we shall mention some of the most important specific policy initiatives that relate to dealing with HIV/AIDS. Greater leadership commitment to improving the disadvantaged lot and the weaknesses in the health system have led to increased funding for dealing with HIV/AIDS. A number of important financial measures have been undertaken. The new action plan introduced in 2001 raised the financial commitment from the Chinese government from 10 million yuan to 100 million yuan, with a further increase to 810 million yuan in 2004 (State Council AIDS Working Committee Office: 2004, pp. ii, 22).<sup>8</sup> At the end of 2005, the amount of funding available for the next two years was raised to 1.5 billion yuan. This funding was to cover activities such as the free antiretroviral therapy for rural and urban poor patients and the continual expansion of the China CARES program. However, there needs to be both better oversight to ensure that local governments will spend the funds responsibly as intended and that incentives are in place so that local governments will match funds where necessary.

In addition, to improve the safety of the blood banks, the government provided over 2 billion yuan (Zhang Fujie et al.: 2006). The Chinese government has also been able to rely on substantial support,

estimated at 2.2 billion yuan, from the international community (MOH, UNAIDS, and WHO: 2006, p. 10). Between 2004 and 2009, round three of the Global Fund is committed to provide \$99 million, with a target of supporting 40,000 patients with antiretroviral (ARV) therapy for the China CARES counties in the central provinces of Hebei, Henan, Shanxi, Shandong, Shaanxi, and Anhui. Round four will provide \$64 million in support for the IDU- and CSW-driven epidemics in Yunnan, Xinjiang, Guangxi, Sichuan, Guizhou, Hunan, and Jiangxi. This will cover some 40,000 to 50,000 patients with ARV over a five-year period. Round six of the Global Fund was to provide \$14 million for the support of civil society organizations in dealing with infected populations and improving public awareness. As discussed below, this last round of funding has proved difficult to implement because of the problems in the development of civil society in China.

These financial commitments are, of course, welcome, but by themselves they will not be enough unless incentives and other behavior change. For example, although the treatment may be free, the testing to determine whether a person has HIV/AIDS is in many cases not free, and local governments and hospitals can use this as a way to generate funds to cover their associated costs. There have been many cases of hospitals withholding relevant information from the patients and charging them for unnecessary services or for drugs that should have been free (Goodman, *Washington Post*, November 8, 2005, p. A01). During SARS, this was a problem when the government announced free treatment for the poor, but local governments charged fees for testing and various other treatments. The government first guaranteed free drugs and tests for HIV/AIDS patients in early 2004, but by June 2006 only 20,000 people were on antiretrovirals and six provinces had not even started free drug provision (Watts: 2006). The free HIV testing was expanded from 365 counties in 15 provinces in 2002 to over 2,300 counties and 3,037 sites across all provinces in 2006. The number of screening laboratories has expanded to 5,500, with 99 able to conduct confirmatory HIV tests (Wu et al.: 2007, p. 584). Costs for the testing labs are to be shared between the central and the local governments, but most of the costs for maintenance and other recurrent costs are the responsibility of the local government (Liu and Kaufman: 2006). Other best practices that have been adopted include needle exchange programs and the use of methadone (for details, see State Council: 2006; Wu et al.: 2007). By 2006, some 729 needle exchange stations had been established in 204 counties or districts in 17 provinces; by October 2007, 49,108 IDUs were said to have joined a clean needle exchange program (State Council AIDS Working Committee Office: 2007, p. 22).

Problems exist with diagnosis since many local governments are still not effectively equipped to determine the disease properly. In fact, in Beijing, Henan, Anhui, Sichuan, and Yunnan, there are only 700 provincial- and county-level doctors trained to diagnose and treat HIV/AIDS (Liu and Kaufman: 2006, p. 81). This lack of professional personnel is compounded by ignorance among the general population about the disease and by the stigma attached to it. Much more extensive public health education is necessary for both the general population and for specific at-risk populations. A good example is the program of Snow Lotus, an independent volunteer group based in Urumqi, Xinjiang, which has launched the Sunrise Club with support from the Urumqi CDC. The club is promoting AIDS awareness and prevention at Xinjiang Agricultural University and is preparing a two-month program of outreach activities on campuses (*China Development Brief*, November 2, 2005).

In addition to interventions that will help with awareness and prevention, the reporting system too needs to be improved further. Currently, the surveillance system is weak among the general population and little use is made of behavioral social science research that could provide good guidance to policymakers. If China's top policymakers do not direct more attention to these areas, there is the risk that the recent policy initiatives and extra funding will not be able to make their full impact felt.

Apart from the general concern about the weakness of the rural health system and the lessons learned from dealing with SARS, one other factor has contributed to the decisive policy shift. The Chinese applications for funding from the Global Fund to Fight AIDS, Tuberculosis, and Malaria were important in bringing about policy change (the following draws on Szlezak: 2005). The framework for applying to the Global Fund and the implementation of the funded programs opened up a political space for alternative voices to be heard in the decision-making process. In particular, the negotiations within China included not only government agencies but also multilateral organizations and both Chinese and international NGOs as members of the China Country Coordinating Mechanism. Most importantly, all participants have equal voting rights and have to sign off on the agreement.<sup>9</sup> The policy shifts noted above were aided by the rejection of the first round application. Rejection caused shock waves among the relevant government circles as many felt that China was too big and too important to be ignored and would not have to take seriously the application guidelines from the international community (discussion with government officials familiar with the drafting process). The first round application focused on prevention policies for IDUs and CSWs in

west China, but the Global Fund felt that it paid inadequate attention to reduction programs (such as needle exchange), none of which were operating in China. As a result, in the second and third round applications, the Chinese approach changed focus to free treatment for FBDs who were seen as victims of poor practices in central China. This switch made it easier to reach a consensus. With the successful application of round three, in round four the focus moved back to IDUs and CSWs and incorporated a set of best practices that had been rejected in the initial application.

However, the implementation of round six highlights the limits to which the Chinese government is capable of developing a broad engagement with civil society to deal with the challenge of HIV/AIDS. The funding for this round was meant to support the work of NGOs and community-based organizations with an NGO as the principal recipient of the funding. This has not happened and the ambitious plans presented in the proposal have not been implemented and have been reversed. The main problem is the dominance of the system by government-organized NGOs (GONGOs) and the inability of small community-based organizations to register legally. The requirement that subrecipients of funds should be legally registered tax-exempt bodies has made it all but impossible for any of the organizations in China to receive the funds. The problem of NGO registration is dealt with in more detail in Chapter Eight. The Chinese authorities decided that a GONGO, the China HIV/AIDS Association that is headed by a former senior government official, should be the principal recipient; the association, in turn, intended that its provincial branches should be the subrecipients. However, the Global Fund decided that the association did not have sufficient capacity and thus for the first two years the principal recipient would be the Chinese CDC. Not only is the CDC classified by the Global Fund as a government entity but also it was the recipient of the previous rounds of funding. The China HIV/AIDS Association was defined as the main subrecipient with ten of its provincial branches also listed as subrecipients together with two other GONGOS. None of the proposed recipients are a community-based organization or represent people living with HIV/AIDS (interviews with those involved in round six drafting; Gill et al.: 2007, pp. 18–19). The difficulty to register for NGOs, combined with the allure of funding from an international organization for quasi-official agencies, thwarted the efforts to bring civil society into playing a much greater role in dealing with HIV/AIDS. This statist bias exists in other areas too and prevents effective state-society collaborations that have been important and successful in other countries.

### Improving the System for Dealing with Pandemics

China's experience in dealing with SARS and its ongoing policy evolution for HIV/AIDS provide some important indicators about how the public health system might respond to future challenges such as avian flu or other pandemics. The responses outlined above reveal the current advantages of the politico-administrative system for dealing with and preparing for crises and the barriers that delay or prevent a fully effective response. These weaknesses include China's sometimes poor understanding of its global responsibilities, the general weakness of the health surveillance and reporting system, and the poor incentives for local governments to report crises promptly and effectively.

Perhaps the most important lesson concerns the level of attention that the central leadership pays to an issue and the clarity of the signal that it sends to local leaders that a policy must be taken seriously. Without a free media or a civil society that can mobilize to advocate policy change and represent marginalized groups, the system is dependent on either bureaucratic interests pushing for change or individual senior leaders becoming aware of a particular problem and deciding to champion it. Given the incentive structures, local leaders are sensitive to clear signals emanating from the Center, yet they have many ways to evade central directives unless they are sure of the seriousness and the consistency with which the leadership takes on a particular issue. This was clear, for example, in former general secretary Jiang Zemin's commitment to crush the influence of the spiritual movement *Falungong*, but it is less clear in the case of his dealing with HIV/AIDS.

Certainly, the central leadership has promulgated a number of important regulations and set up a new institutional framework for HIV/AIDS policy, and top leaders have kept up their high-profile visits to HIV/AIDS patients. But these visits have not been reciprocated by local leaders. This is in marked contrast to the time when Jiang Zemin publicly administered polio vaccine to children, and provincial leaders quickly followed his example. Local leaders have not publicly embraced HIV/AIDS patients as Hu Jintao and Wen Jiabao have (see *China Development Brief*, May 2005, p. 16). Following SARS, the central government vowed to punish local officials who cover up flu outbreaks. This was reinforced in the State Council's emergency response guidelines adopted in January 2006 that called for emergencies or incidents to be reported to the State Council within four hours and for the public to be informed in a timely, accurate fashion ([http://english.peopledaily.com.cn/200601/09/eng20060109\\_233888.html](http://english.peopledaily.com.cn/200601/09/eng20060109_233888.html)). Yet it remains unclear how high a priority

the guidelines are for the Center in terms of enforcement, what the mechanisms are for punishment, and whether this will override the incentives for local governments to cover up an outbreak.

Chapter Three describes how poorly aligned the incentives for local officials are for investing resources, time, and energy into social development in general and public health in particular. The examples of dealing with SARS and HIV/AIDS raise other general concerns with which China's policymakers must deal. First, these kinds of epidemics have global consequences that have been poorly perceived by China's leaders, especially those at the local level. With SARS and HIV/AIDS, it took both domestic pressure and international criticism before the Chinese leadership moved to act. Without this external pressure, China's local leaders seemed content to try to bury the problem and to punish those domestic critics who tried to bring the problem to the attention of the global community. Government officials at each level undertook action only when they were pressured to do so. The appointment of Hong Kong's Dr. Margaret Chan to head the WHO in January 2007 might provide an opportunity for closer cooperation between the Chinese authorities and the global agencies that are trying to coordinate a response to avian flu and other future global diseases. On the other hand, bureaucratic interests in China may override international commitments. It may also be the case that Chinese officials are unwilling to release information that they feel might embarrass Dr. Chan early on in her tenure.

The international community has consistently held different views not only about SARS but also about the seriousness of the spread of HIV/AIDS in China. This has impacted on the question of how to deal with avian flu. Dr. Julie Hall, an infectious disease expert in the WHO office in Beijing, criticized the Ministry of Agriculture (MOA) for not sharing samples of a newly discovered strain of avian flu. In her words, "unless the ministry tells us what's going on and shares viruses on a regular basis, we will be doing diagnostics on strains that are old." Naturally, this was denied by the ministry that is also careful to refute any suggestions that China might be the source of outbreaks outside of its borders. The ministry blamed the United States for the fact that China had not yet shared the avian flu virus, claiming that the U.S. labs had not completed the necessary import procedures. The WHO expert felt that the MOA had not yet come around to putting global interests ahead of its own. When the Chinese authorities regained their composure after SARS and began to reject the notion that they had been at fault, officials in Guangdong even suggested that the disease had not originated in China but had been present in the United States in February 2002 (Lam, at CNN.com, May 13, 2003). Following its experience with SARS and HIV/AIDS,

the MOH has become much more globally aware and has worked more effectively with the international community. This is not the case with the MOA that is more domestically oriented and has far less international exposure. It controls access to the samples from poultry and, as noted above, has not been forthcoming.

Second, China needs to improve the infrastructure at all levels that deals with crisis and information management. The initial response to crisis is denial and cover-up and once action is called for, the vertical and segmented structure of China's bureaucracy hamper effective action. For example, leaders in Guangdong initially did not feel any urgency to provide information about SARS to Beijing, thus undermining the capacity to act effectively. Neither did the military hospitals think that it was their responsibility to inform the civilian authorities. CDC head Li Liming was even reported to have said, "If we controlled the military hospitals at the beginning, we never would have had this epidemic in Beijing" (Pomfret, in *Washington Post*, April 27, 2003).

We see the same problems with avian flu. Although the MOH is charged with looking after the health of the public, the MOA is concerned with the farmers and their livelihoods. The MOH deals with disease spread among humans, the MOA that among animals, but neither is responsible for transmission of disease from animals to humans. According to Zhong (2007, pp. 92–93), initially both ministries shirked responsibility and became motivated only once funding was increased and which they then proceeded to fight over. It was only in 2005 that the two ministries set up a cooperative structure to develop a joint approach, including a reporting system and a joint inspection team.

In the Chinese system, it is notoriously difficult to gather information across different sectors. A system that encourages cross-sectoral collaboration needs to be developed to provide comprehensive, integrated solutions. All too often different ministries or localities work in their own respective interests and undermine national policy. China often sets up ad hoc bodies that make decisions that cannot then be enforced or are subverted by agencies at the same level or at lower levels. This affects both policy coordination and policy implementation. With respect to disease outbreak, it is important to keep in mind that the MOH is an institutionally weak player and, for example, party secretaries of major provinces or municipalities such as Guangdong or Beijing would outrank the MOH minister. Furthermore, the MOA is not only new to this area but institutionally weak as well. Provincial health departments and local disease control centers have to report first to the local party authorities.

A number of steps have been taken to improve the situation. In mid-May 2003, China announced that it would set up an Emergency Response

Bureau under the State Council to act as a powerful new agency to deal with future health crises and natural disasters (*SCMP*, May 13, 2003, Internet edition). The bureau is modeled on the U.S. Federal Emergency Management Administration that was established in 1979 and was absorbed into the Department of Homeland Security in March 2003. Tasked with drawing up plans for dealing with future emergencies, membership of the bureau, which was put into operation in December 2005, comprises the heads of key ministries and commissions. With respect to HIV/AIDS, in February 2004, a new State Council AIDS Working Committee was set up to improve coordination. Headed by Vice Premier Wu Yi, the committee includes vice ministers of 23 key ministries and mass organizations, together with the vice governors of China's worst-affected provinces. These kinds of organizations should help improve the information flow across the various bureaucratic institutions. However, to date the AIDS Working Committee has seldom met and its true effectiveness is thus questionable.

One further key step was the promulgation on May 12, 2003 of temporary regulations for dealing with health emergencies. Overseen by Premier Wen Jiabao, these regulations were drafted in a record 16 days and approved on May 9. The six chapters and 54 articles deal with outbreaks of infectious diseases, large-scale food poisoning episodes, and other serious public health threats. They lay out general rules and guidelines for prevention and reporting. For example, the guidelines call for national authorities to be informed within four hours of a major outbreak, and provincial governments within eight hours, something reiterated for all disasters in the January 2006 emergency response guidelines. The guidelines also call for setting up Centers for Disease Control and Prevention all the way from the central government down to the county, something that adds to the fiscal burden of local governments.<sup>10</sup>

Such administrative structures help if they are backed up by strong political support and clearer guidelines for effective reporting. In November 2005, the outbreak of avian flu led the State Council to issue emergency regulations to respond to major animal epidemics. The regulations call on veterinary authorities at various levels to draft contingency plans and to outline processes for reporting. Although the regulations state that any attempt to delay or fail to report an outbreak will be severely dealt with, they also state that only "competent veterinary authorities under the State Council" can release information on major animal epidemics. They call for coordination with the forestry authorities when dealing with animal infections and for coordination with health authorities when an outbreak is likely to infect humans (*People's Daily* online, at <http://english.people.com.cn/20511/22/eng20051122.223094.html>).

These suggestions are reasonable, but the incentives for the various agencies are not necessarily aligned. Post-SARS, conflicting interests concerning trade in wild animals threatened to undermine any attempt to control future outbreaks of the disease. On June 3, 2003, Guangzhou municipal authorities announced that they wished to move toward centralizing the slaughter of poultry to improve hygiene in wet markets (*SCMP*, June 4, 2003). This followed earlier directives in Guangzhou and Shenzhen to stop the sale and consumption of wild animals. Fines ranged up to 10,000 yuan. It is thought that the most likely explanation for the origin of the disease was that it crossed from animal species to humans in southern China, the civet cat being seen as the most likely suspect. However, at the time this had not been proved conclusively and agricultural authorities and the forestry bureau objected to the ban. The forestry bureau is involved in direct regulation of the rearing and sale of wildlife, and forestry officials saw the development of this trade as a way to raise farmers' incomes—a primary objective of the government. They were reported to have tried to lift the June ban, arguing that there was no proven link that justified its continuation (*FEER*, August 21, 2003). Of course, in the case of an outbreak of an infectious disease, it will be the health authorities who receive the blame and not the forestry officials. Under these circumstances, it is difficult to apply a coherent policy.

The situation for reporting on major disease outbreaks remains confusing with respect to what to report, when, and to whom. Thus, more effective reporting flows must be developed. One issue much debated after the outbreak of SARS was the need to create a better system of information management. There is a fundamental tension between a political system structured to control and manage information flows and a society that is information savvy and “wired.” Such an informational asymmetry is dysfunctional when the official media report that all is under control and the online international news media tell a different story.

China's leaders claim that they have provided sufficient information about avian flu, but major incentives persist for local leaders to deny the problem or to underreport. To be fair, the underreporting is enhanced by the general weakness of the rural medical system and the poor levels of training that may mean that cases are not diagnosed properly. Chinese estimates of HIV/AIDS infections are consistently lower than international estimates, and studies of particular at-risk groups suggest higher rates than the official statistics. For example, in Yunnan, based on data of HIV prevalence and the population size of subgroups, there were an estimated 80,000 people with HIV/AIDS at the end of 2003, as opposed to official figures of 14,905.<sup>11</sup> The death totals were around 10,000 rather

than the official figure of 558 (Yunnan Center for Disease Control and Prevention: 2004, pp. 3, 12). The confusion in 2005 and 2006 about the situation with respect to avian flu (H5NI) does not bode well for transparency and clarity in reporting. There was also an initial delay and secrecy surrounding the outbreak of pig-borne bacterium streptococcus in Sichuan that was reported to have killed more than 35 people (<http://news.bbc.co.uk/2/hi/asia-pacific/4742319.stm>).

Senior leaders have recognized the problems with local government incentives and have called on local officials to pay more attention to social justice and sustainable development. Stressing that HIV/AIDS must be taken seriously, State Council Document No. 7 (March 2004) announced that government leaders would be held accountable for their work with respect to HIV/AIDS and that this would be taken into account in their job performance assessments (State Council AIDS Working Committee Office: 2004, p. 10). This step will help if it is implemented effectively.

As noted, local authorities may not report the outbreak of diseases before they are given the green light by the national-level authorities, thus encouraging the suppression of bad news. When journalists asked local Guangdong health official Huang Qingdao why they had not reported the outbreak of SARS earlier, he replied, "atypical pneumonia is not a disease we're legally required to report, so we didn't feel it was necessary to make it public. Now, because it has had a big social impact, we decided to make it public" (*FEER*, April 10, 2003). This is a point worth considering as it helps explain the predicament of local officials should they wish to take action on new diseases. According to the 1996 implementing regulations, SARS would have fallen under the category of a highest-level secret (*jia lei*) as it was an infectious disease that covered a wide area. As a result, it could not be disclosed until the MOH or those organs authorized by the ministry made the disclosure. This means that without ministry disclosure, any local official talking publicly about the disease is liable for prosecution. This is a disincentive for transparency, to say the least.

The tight control on the media and on civil society organizations makes it all the more difficult for problems and cover-ups by local officials to be brought to wider public attention. These problems point to the need to create a new system of information management. The weakness of civil society and the suspicion with which local authorities often view NGOs undermine China's capacity to deal with HIV/AIDS. Many of those infected or at risk are from groups that are considered to be engaged in illegal activities (prostitution or drug use) or are considered immoral (homosexuals). Although policy has shifted significantly, these

groups are still viewed at best with suspicion and at worst as criminals. As a result, it is very difficult for government and party agencies to reach out to them. This is something that could be performed more effectively by NGOs and grassroots support groups.

Public health education and care for those afflicted with diseases such as HIV/AIDS would be helped by if there were to be a greater involvement of the community and nongovernmental organizations. In countries such as Thailand that have adopted effective strategies to confront the spread of HIV/AIDS, government has forged strong partnerships with nongovernment organizations and has mobilized the resources of civil society and community-based organizations. There is evidence of increased NGO activity with respect to HIV/AIDS work in China, but senior CCP leaders remain ambivalent about the development of the NGO sector and groups such as People Living with HIV/AIDS are not involved effectively in policymaking.

This ambivalence was best seen in the summer of 2007. With the party congress due to be held in October and the summer Olympics in 2008, the work atmosphere for NGOs in areas that had formally been tolerated (health and environment) became much tougher and came under more scrutiny. Yet, in July 2007, the vice minister of the MOH, Wang Longde, noted that grassroots organizations were more able to reach the vulnerable groups than government agencies. He described these organizations as “an indispensable force in the war against the deadly disease [HIV/AIDS]” (*China Daily*, July 18, 2007). This message was reinforced by Peter Piot, the head of UNAIDS, in a September speech to the World Economic Forum in Dalian when he stressed the need for the government to give rein to NGOs and to enroll the support of companies (*SCMP*, September 11, 2007). Also in July 2007, in Henan, a province notorious for its repression of AIDS activists and for its attempts to cover up the real situation, an AIDS Prevention and Treatment Association was established as an NGO to help those infected with HIV/AIDS. Its members included HIV carriers as well as people living with HIV/AIDS, lawyers, teachers, journalists, and entrepreneurs (*Xinhua* News Agency, July 10, 2007).

Both domestic and international NGOs as well as government-backed NGOs are taking on important roles in dealing with HIV/AIDS. A directory of NGOs published in June 2005 lists 101 civil society organizations and projects working in the areas of HIV/AIDS prevention, treatment, and advocacy (*China Development Brief*, July 2005, p. 1). These range from well-established groups such as the China Association of STD/AIDS Prevention and Control to small groups providing help and care for children or working with “same sex love groups.” In Yunnan province,

traditional mass organizations such as the Women's Federation have been very active and the provincial Red Cross has conducted peer education among young people, organizing 1,500 training courses for some 30,000 people (Yunnan Center for Disease Prevention and Control: 2004, p. 26). In addition, international NGOs such as Save the Children UK have been very active in Yunnan, Henan, and Anhui, working with AIDS orphans. Together with the Ministry of Health, the Clinton Foundation launched a service fellowship to place clinical experts in areas affected by HIV/AIDS that includes one-month training in the United States (*China Development Brief*, November 2, 2005). People Living with HIV/AIDS have established a number of self-support groups in Xinjiang, Shaanxi, Shanxi, Guizhou, Shanghai, Beijing, Guangdong, and Sichuan (State Council AIDS Working Committee Office: 2004, p. 13).

This review of China's treatment of contagious diseases reveals both the strengths and the weaknesses of the current system. Still, if mobilized, China's apparatus can be a very powerful force that can organize resources to deal with major health challenges. However, there are significant incentives and institutional barriers to recognizing the emergence of health challenges that need to be overcome. This is an area where the role of the government needs to be clear and where incentives need to be aligned to make sure that institutions at all levels pursue the public good.