DANGEROUS SECRETS—SARS AND CHINA'S HEALTHCARE SYSTEM

ROUNDTABLE

BEFORE THE

CONGRESSIONAL-EXECUTIVE COMMISSION ON CHINA

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

MAY 12, 2003

Printed for the use of the Congressional-Executive Commission on China

Available via the World Wide Web: http://www.cecc.gov

U.S. GOVERNMENT PRINTING OFFICE

88–399 PDF WASHINGTON : 2003

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

CONGRESSIONAL-EXECUTIVE COMMISSION ON CHINA

LEGISLATIVE BRANCH COMMISSIONERS

House	*Senate*
JIM LEACH, Iowa, *Chairman*	CHUCK HAGEL, Nebraska, *Co-Chairman*
DOUG BEREUTER, Nebraska	CRAIG THOMAS, Wyoming
DAVID DREIER, California	SAM BROWNBACK, Kansas
FRANK WOLF, Virginia	PAT ROBERTS, Kansas
JOE PITTS, Pennsylvania	GORDON SMITH, Oregon
SANDER LEVIN, Michigan	MAX BAUCUS, Montana
MARCY KAPTUR, Ohio	CARL LEVIN, Michigan
SHERROD BROWN, Ohio	DIANNE FEINSTEIN, California
	BYRON DORGAN, North Dakota

EXECUTIVE BRANCH COMMISSIONERS

PAULA DOBRIANSKY, Department of State*
GRANT ALDONAS, Department of Commerce*
D. CAMERON FINDLAY, Department of Labor*
LORNE CRANER, Department of State*
JAMES KELLY, Department of State*

JOHN FOARDE, *Staff Director*
DAVID DORMAN, *Deputy Staff Director*

* Appointed in the 107th Congress; not yet formally appointed in the 108th Congress.

CONTENTS

DANGEROUS SECRETS—SARS AND CHINA'S HEALTHCARE SYSTEM

MONDAY, MAY 12, 2003

CONGRESSIONAL-EXECUTIVE
COMMISSION ON CHINA,
Washington, DC.

The roundtable was convened, pursuant to notice, at 2:30 p.m., in room 2255, Rayburn House Office Building, John Foarde [staff director] presiding.

Also present: David Dorman, deputy staff director; Tiffany McCullen, office of Under Secretary of Commerce Grant Aldonas; Susan O'Sullivan, office of Assistant Secretary of State Lorne Craner; Andrea Yaffe, office of Senator Carl Levin; and Susan Roosevelt Weld, general counsel.

Mr. FOARDE. Good afternoon. I would like to welcome everyone to this staff-led issues roundtable of the Congressional-Executive Commission on China [CECC]. On behalf of Senator Chuck Hagel, our Co-Chairman, and Congressman Jim Leach, our Chairman, and the members of the CECC, welcome to our panelists and to those of you who are here to listen to their testimony.

The subject that we are going to tackle today is important and timely. It has been in the news a lot over the last couple of months. Specifically in the case of Severe Acute Respiratory Syndrome [SARS], mainland China has reported more than 4,600 cases and over 219 deaths from the disease. Recent news articles report that over 16,000 people are now under quarantine in Beijing, and thousands more in Nanjing and elsewhere. These massive quarantine measures are becoming commonplace throughout China in the country's increasingly stringent efforts to control the epidemic. While the number of cases in the rest of the world seems to be stabilizing or possibly even decreasing, China's caseload continues to increase as the disease spreads into the country's interior.

A problem particular to China is that migrant workers, alarmed by the rise of the disease in the cities, have shown a tendency to head home to poverty-stricken inland provinces in hopes of avoiding infection. In some cases, of course, they are bringing the illness with them. In a recent statement, Premier Wen Jiabao warned that the country's rural healthcare system is weak and might prove incapable of handling a SARS epidemic in the countryside. Some observers are now asking whether the public health system, already stretched thin by the central government attempts to shrink local government budgets, will simply collapse under the weight of SARS and the oncoming tidal wave of HIV/AIDS.

But beyond public health, the SARS outbreak has raised broader social, political, and economic questions that demand new policies from Chinese leaders. We wanted to explore those policies, the existing system, specifically the SARS problem, and look at the medium and longer term. So, we are delighted to have with us this afternoon, three distinguished panelists. I will introduce all of them individually before they speak, but welcome to Dr. Gail Henderson from the University of North Carolina at Chapel Hill; Huang Yanzhong, Ph.D. from Grand Valley State University; and Bates Gill, Ph.D., from here in Washington at the Center for Strategic and International Studies [CSIS].

Without further ado, let me introduce Dr. Gail Henderson. She is a medical sociologist, professor of social medicine, and adjunct professor of sociology at the UNC-Chapel Hill. Her teaching and research interests include health and inequality, health and healthcare in China, and research ethics. She is the lead editor of "Social Medicine Reader," and she has experience with qualitative and quantitative data collection analyses, as well as conceptual and empirical cross-disciplinary research and analysis.

Professor Henderson and our other panelists, as usual, will be asked to speak for 10 minutes. I will keep track of the time and alert you when you have 2 minutes remaining. And then, as is usually the case, if we don't get to all of your points, we will try to catch them up in the question and answer session after all three panelists have spoken.

So with that, I would like to recognize Professor Henderson. Thank you very much for coming.

STATEMENT OF GAIL E. HENDERSON, PROFESSOR OF SOCIAL MEDICINE, UNIVERSITY OF NORTH CAROLINA SCHOOL OF MEDICINE, CHAPEL HILL, NC

Ms. HENDERSON. Thank you very much for inviting me. I feel very honored to be here, and I hope that we will all have a really fruitful discussion of the important topic at hand.

America has had a lot of images of the health and the public health of China and the Chinese during the last century. It began thinking of China as the sick man of Asia. Two decades later, after the establishment of the People's Republic, the dominant image was healthy, red-cheeked babies born in a Nation that somehow provided healthcare for all.

Of course, the real story about health in China is more complex than either of those images. But in a country as vast and varied as China still is, many realities are true. The recent spread of HIV/AIDS and now the SARS epidemic have placed enormous stress on the Chinese healthcare system, as you said in your introduction. It is important to realize that any healthcare system, in no matter how developed a country, would be stressed by this kind of a unprecedented epidemic.

To assist China in dealing with SARS, I think we must have a clear understanding of the forces that have shaped this system and the current epidemics. So, in my written testimony—which is longer than the 10 minutes—I really focus on what I think the history can tell us about the Chinese healthcare system and its strengths and weaknesses, and I think some of the current myths

that we have in our media, and our response to SARS in China. I make four main points.

First, public health is not a money making operation. Public health, differentiated from healthcare services, is disease surveillance, environmental sanitation, maternal and child health, health education, nutrition, and food hygiene. Those do not make money.

China was able to revolutionize public health and its health status indicators, and establish a multi-tiered infrastructure of hospitals, public health departments, and clinics under Mao Zedong, because of strong government support and resources. This is easier to accomplish when market forces are held at bay, as they were until Mao's death.

The second point, China's current healthcare system, curative clinic hospital-based system, has been shaped by economic incentives in the post-Mao era familiar to all students of modern China. They have emphasized the development of high technology hospital-based medical care, which had been substantially neglected under Mao. The move away from a centralized collective welfare system that had fostered a strong public health orientation resulted in de-emphasis of public health functions, especially at the lowest levels. This has been well-documented by the Chinese and others.

Aggregate income, of course, as you all know, rose substantially in China as has health status in general, and continues until this day to improve. But, inequality has also increased and with it health and economic disparities between rich and poor. This is the characteristic of this system as we know it now.

Third, infectious diseases often strike hardest at the most vulnerable groups, those with the least access to government safety nets. This is true for HIV in China and true in all nations for HIV. The fear with SARS is that weaknesses in the world health system, particularly in remote areas, will make containing the disease much more difficult.

The public health infrastructure remains. I really want to emphasize that. It can be supported and strengthened by forces now at work in China and from outside. Long before the SARS epidemic, in the 1990s, the Chinese Government was developing a very ambitious plan to respond to the breakdown of public health services in rural areas. That plan went through a lot of pilot testing, was initiated in 2002, and it reinforces rural health insurance and public health control, establishing public health—not curative medicine—public health hospitals at the lowest levels. I think those things are quite important to recognize.

Fourth, if we are to effectively assist China's response to SARS, we must understand the sensitivity for any government of the double-threats to public health and the economy, and reject—if you'll excuse me—the rhetoric of accusatory phrases like, Dangerous Secrets, the title of our roundtable. Instead, we must recognize and build on the work of responsible dedicated professionals in China, and the United States, and other countries, people who are best-positioned to develop strategies to contain SARS and prevent the emergence of other deadly pathogens.

Now it has been suggested that lessons from AIDS and how China dealt with AIDS can be applied to SARS. So, I want to re-

flect on this comparison a bit in the remainder of my testimony. A number of recent media reports on the SARS epidemic remind us that China's secrecy and failure to respond characterizes its response to AIDS as well. These shortcomings were especially featured in media reports at the end of 2001, when it became known that possibly thousands of commercial plasma blood donors in impoverished rural areas were becoming infected with HIV in China. We excoriated the Chinese Government for allowing the AIDS epidemic to spread through hundreds of poor villages.

But, I would like to ask us all to reflect on a couple of things. Thinking about that response, I think we have to ask how other countries with far-greater resources have performed in responding to the AIDS epidemic. We must also ask whether we apply a double-standard to some developing countries when it comes to their public health performance. In fact, few governments, rich or poor, have been immediately forthcoming about the spread of HIV within their boundaries, and few, if any, have successfully stemmed the spread of AIDS.

In my view, the use of public health challenges as shorthand political critiques is a real danger as we move forward to combat this newest global threat, SARS. Just turning the lens a little bit, if the Chinese applied the same shorthand to characterize the U.S. healthcare system and its capacity to respond to crisis—a system, I should remind you, that spends twice as much as the next big spending country on healthcare per capita—what would they look at? We might be reading in the Chinese press about systematic discrimination against African Americans who are ten times as likely to die from HIV as whites in this country, reflecting the disgraceful fact that disparities in morbidity and mortality rates between blacks and whites are actually greater now than in 1950. We might also be reminded of the CDC's rapid response to protect U.S. senators from anthrax, while failing to extend the same response to postal workers.

While I don't minimize the real gravity of the HIV epidemic among former plasma donors, or the negative consequences of delay, I think the media's focus on this aspect of the story drowns out really important realities that I wanted to bring before this Commission. They include evidence in the medical literature as early as 1995 that the plasma donors in rural areas were being infected. International AIDS conferences in 1996 and later also reported on the studies of the blood supply and what people could do in China to improve the quality in the testing, which was not very good also during this time period.

By 2002, the Chinese Ministry of Health had a publicly outlined plan for dealing with these and other populations with HIV. In fact, China's progress in developing HIV prevention and treatment programs rarely makes the evening news. But, there has been an extraordinary amount of assistance in the last few years provided by the United States and other countries through biomedical and scientific collaboration, and it is having a very important impact.

The NIH awarded a Comprehensive International Program on Research on AIDS [CIPRA] grant to China in the summer of 2002. That grant provides funds for vaccine development, research on risk factors, behavioral interventions, treatment trials, and so on.

This also has fostered a lot of interest in human subjects protections, which I consider to be very important, because any NIH money that goes to China has to have NIH human subject protections attached.

Perhaps most important, clinical research also has the potential to focus attention on unmet treatment needs, just as in Africa when the AIDS researchers of the world descended on Durban, and they saw the epidemic in Africa and then it became unacceptable to have some people get treatment and others not. In some ways the same things have happened in China, and the government has established funds for treatment in 100 counties in China identified as the hardest hit by AIDS. This is extremely important. Again, although SARS is prompting a lot of activity on the part of the government, these things didn't happen overnight. They have been in the works for several years.

Statistics on disease and death rates are often used like Rorschach tests to measure the legitimacy of the government. Infectious diseases, including emerging pathogens like HIV and SARS, are particularly potent foci for such critiques, in part because they tend to fall hardest on the most vulnerable and the least well-served by society. It is not clear how large the SARS epidemic in China will be or how long it will last. I really want to emphasize how little we know about this epidemic. There are still problems defining cases. So, I think we have to be very careful, even with the statistics that we have.

In order to assist China's response, we must understand the strengths and weaknesses in the system, the real strengths and the real weaknesses. Actually, SARS and AIDS are a direct if unintended consequence of economic reform and integration into the global community, which are reforms that the United States has encouraged, and in which the business and scientific communities play key roles. So, rather than focus on failures—and again, I think everyone acknowledges that there have been considerable failures—we must credit China's current efforts to contain the epidemic in its hospitals, cities, and borders, and openness to international collaboration and information sharing for what they are now, contributions to the global efforts to control this deadly disease and prevent and epidemic from becoming a pandemic. Thank you.

[The prepared statement of Ms. Henderson appears in the appendix.]

Mr. FOARDE. Thanks very much. We can pick up some of the remaining points when we get to the Q and A, but very useful.

Next, I would like to recognize Professor Huang Yanzhong, who is assistant professor of political science at Grand Valley State University and beginning in September of this year, Dr. Huang will take up duties as assistant professor at the John C. Whitehead School of Diplomacy and International Relations at Seton Hall University.

Dr. Huang received his Ph.D. in political science from the University of Chicago in 2000. He also completed a master's degree in international relations at the well-known Fudan University in Shanghai, where he also received a bachelor's degree in international politics. His research interests include global health, secu-

rity and development, and Chinese politics. He has published numerous articles, and books, and journals. We are delighted to have him with us this afternoon. Dr. Huang, please.

STATEMENT OF YANZHONG HUANG, ASSISTANT PROFESSOR OF POLITICAL SCIENCE, GRAND VALLEY STATE UNIVERSITY, ALLENDALE, MI

Mr. HUANG. Thank you for the nice introduction. It is an honor to be here to share with the Commission and the public my knowledge about the politics of public health and SARS in China.

As far as the impact of the SARS epidemic is concerned, it is now clear that the Chinese leadership is facing the most severe social-political crisis since the 1989 Tiananmen crackdown. Given the political aspect of the crisis, this testimony will focus on the problems in China's political system. It will proceed in three sections. I will first discuss how problems in the political system allowed SARS to transform from a sporadic nuisance to an epidemic that now affects hundreds of millions of people across the world. I will then examine the recent government crusade against SARS, with special attention on its implications for human rights and the rule of law in China. I will conclude with some policy recommendations for the Commission to consider. The complete written statement, which is about 15 pages long, will be posted on the CECC Web page. What I will present here is just a summary of the main points.

First, the making of the crisis. The events that unfolded during November 2002 and April 2003 revealed two major problems inherent in China's political system: coverup and inaction. As far as a coverup is concerned, existing political institutions in China have not only obstructed the information flow within the system but also distorted the information itself. It is worth noting that while bureaucratic misinformation is not something unique to China, the country's refusal to enfranchise the general public in overseeing the activities of government agencies makes it easy for upper-level government officials to be fooled by their subordinates. But, paradoxically, manipulation of data, even though it erodes the governing capacity of the central Chinese state, also serves to shore up the regime's legitimacy. Because of the dying communist ideology and the official resistance to democracy, the legitimacy of the current regime is rooted in its constant ability to deliver socio-economic progress. As far as this performance-based legitimacy is concerned, government officials routinely inflate data that reflect well on the regime's performance while underreporting or suppressing bad news such as plagues and diseases.

In explaining the government's slow response to tackling the original outbreak, we should keep in mind that the health system is embedded in an authoritarian power structure. In the absence of a robust civil society, China's policymaking does not feature a salient "bottom-up" process to move a "systemic" agenda in the public to a "formal" or governmental agenda as found in many liberal democracies. Because of this top-down political structure, each level takes its cue from the one above. If the leadership is not dynamic, no action comes from the party-state apparatus. The same political structure also encourages lower-level governments to shift their policy overload to the upper levels. As a result, a large number of

agenda items are competing for the attention of upper-level governments.

The problem here is that in the reform era the bias toward economic development has made public health the least of the concerns of Chinese leaders. Compared to economic issues, a public health problem often needs an attention-focusing event, such as a large-scale outbreak of a contagious disease, to be finally recognized, defined, and formally addressed. Not surprisingly, SARS did not raise the eyebrows of top decisionmakers until it had already developed into a nationwide epidemic.

Thanks to strong international pressure, the government finally woke up and began to tackle the crisis seriously. In terms of the policy implementation, the Chinese system is in full mobilization mode now. Yet in doing so, a bias against routine administration has been built into the implementation structure. In fact, the increasing pressure from higher authorities makes heavy-handed measures more appealing to local officials, who find it safer to be overzealous than to be seen as "soft." There are indications that local governments overkilled in combating SARS.

In some cities, those who were quarantined lost their jobs. Until recently, Shanghai was quarantining people from some regions hard hit by SARS, such as Beijing, for 10 days even if they don't show any symptoms. While overall, Chinese people are cooperating with the government measures, even official reports suggest that many people were quarantined against their will. The heavy reliance on quarantine raises a question—will anti-SARS measures worsen the human rights situation in China? Again, the question is not unique to China, even the United States is debating whether it is necessary to apply a dictatorial approach to confront health risks more effectively.

While China's law on prevention and treatment of the infectious disease does not explicate that quarantines apply to SARS epidemic, articles 24 and 25 in the law authorize local governments to take emergency measures that may compromise personal freedom or liberties. The problem is that, unlike democracies, China in applying these measures tended to exclude the input of civil associations or civil societies. Without engaged civil society groups to serve as a source of discipline and information for government agencies, the state's capability is often used against the society's interest. Official reports suggested that innocent people were arrested simply because they relayed some SARS-related information to their friends or colleagues. According to the Ministry of Public Security, since April, public security departments have investigated 107 cases in which people used Internet and cell phones to spread so-called "rumors."

Another problem that may complicate the government's efforts to combat SARS is policy difference and political conflicts within the top leadership. The reliance on performance for legitimacy places the government in a policy dilemma. If it fails to place the disease under control and allows it to run rampant, it could become the event that destroys the Party's assertions that it improves the lives of the people. But if the top priority is on health, economic issues will be moved down a notch, which may lead to more unemployment and more social and political instability. The disagreement on

how to deal with the relationship was evidenced in the lack of consistency in central policy.

On April 17, the Politburo Standing Committee meeting focused on SARS and gave priority to people's health and life security. Eleven days later, the Politburo meeting emphasized former President Jiang Zemin's "Three Represents" and called for a balance between combating SARS and economic work, reaffirming the central status of economic development. This schizophrenic nature of central policy is going to cause at least two problems that will not help the state to boost its capacity to combat SARS.

First, the Party center's failure to signal its real current priorities loud and clear may confuse local authorities, which may take advantage of the policy inconsistency to "shirk" or minimize their workload. Second, the policy difference could aggravate China's faction-ridden politics, which in turn may reduce central leaders' autonomy in fighting against SARS.

In fact, former President Jiang's allies in the Politburo Standing Committee were quite slow to respond to the anti-SARS campaign embarked upon by President Hu Jintao and Premier Wen Jiabao on April 20. The making of big news in the official media—President Jiang's order on April 28 to mobilize military health personnel suggests that Hu Jintao and Wen Jiabao do not have authority over the military. Intra-party rivalry in handling the crisis reminds people of the political upheavals in 1989, when the leaders disagreed on how to handle the protests and Deng Xiaoping, the paramount leader, played the game between his top associates before finally siding with the conservatives by launching a military crackdown.

Given the international implications of China's public health, it is in the U.S. interest to expand cooperation with China in areas of information exchange, research, personnel training, and improvement of the country's public health facilities. But it can do more. It can modify its human rights policy so that it accords higher and clearer priority to health status in China. Meanwhile, it should send a clearer signal to the Chinese leadership that the United States supports reform-minded leaders in the forefront of fighting SARS.

To the extent that regime change is something that the United States would like to see happen in China, it is not in the U.S. interest to see Hu Jintao and Wen Jiabao purged and replaced by a less-open and less-human government, even though that government may still have strong interests in maintaining a healthy U.S.-China relationship. The United States simply should not miss this unique opportunity to help create a healthier China. By calling President Hu in April, praising what Beijing was doing, and indicating his willingness to provide any possible support and assistance, President Bush has taken a very important step in the right direction.

[The prepared statement of Mr. Huang appears in the appendix.]

Mr. FOARDE. Dr. Huang, thank you very much.

We would now like to go on and welcome an old friend of both the individual members of the Commission and all of us on the Commission staff, Dr. Bates Gill.

Bates currently holds the Freeman Chair in China Studies at the Center for Strategic and International Studies here in Washington, DC. A specialist in east Asian foreign policy and politics, Bates' research has focused primarily on northeast Asian political security and military technical issues, especially with regard to China. Among his current projects, he is focusing on the domestic socio-economic challenges in China, including issues related to HIV/AIDS and SARS. Results from this work have appeared in such publications as Foreign Affairs, the New York Times, and the Far Eastern Economic Review.

Bates, welcome. Thank you very much for spending some time with us this afternoon.

STATEMENT OF BATES GILL, FREEMAN CHAIR IN CHINA STUDIES, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES, WASHINGTON, DC

Mr. GILL. Thank you very much. And thanks to everyone here at the Commission for the opportunity to appear before you today on this very timely, and I think important, topic.

As we all know, the repercussions of China and the SARS epidemic will resonate well beyond tragic, unfortunate, and growing loss of life. There is a silver lining here in some sense. I think the progression of the epidemic from Guangdong to Beijing, into the Chinese countryside, and across the world, clearly demonstrates the mainland's increasing economic and social openness, its mobility internally, and interdependence within the country itself, interdependence within the East Asia region, and across the planet. We also see a coming out of this a mobilization a concern for China's healthcare system, both internally, and internationally. We can hope that this will spark a greater degree of openness and accountability within the Chinese leadership.

I agree with Dr. Henderson that there is still much we do not know, and we are at a very early stage in our analysis. But I think it is worth thinking about some of these questions and trying to get a better grasp of where the SARS epidemic is going to be taking us in terms of some of these questions of openness and change in China. On the other hand, we see that the SARS outbreak exposes a number of very troubling developments as well: old-style misinformation, opaque miscommunication, the ailing healthcare infrastructure, and a continuing reticence, by and large, to work openly with foreign partners. So these negative developments also raise serious questions about the Chinese ability to cope with other infectious diseases, such as hepatitis, tuberculosis, and HIV/AIDS.

I would like to present my remarks today in three parts. First, to talk a little bit about what I see as some of the lessons. Second, what some of the implications are, in the near term, of the SARS epidemic. And then recommend steps that we might consider to combat future healthcare crises in China more effectively. I will note at the outset that I am drawing these remarks largely from my recent publications, such as in the "International Herald Tribune" and the "Far Eastern Economic Review." And if I may, I will submit these for the record as well.

[The above-mentioned publications appear in the appendix.]

Lessons. Clearly, first of all, we unfortunately saw, yet again, a rather sclerotic and reactive political and bureaucratic process in China. In taking so long to reveal the real dimensions of the SARS problem, the Chinese authorities unfortunately underscored their reputation as secretive and often out of step with international practice. Unfortunately, it wasn't just a question of bad communication, but we saw that there was deliberate misinformation, and even obstruction of information in the case of U.N. assessment teams attempting to understand the full extent of the epidemic.

Some have argued that this current openness though, more recently, to SARS, indicates a new and more positive direction for the Chinese leadership. That may be, and we can hope so. But, I think it remains relatively early to know with any certainty, and whether or not this can be broadened to encompass a new, across-the-board approach that doesn't include just healthcare issues, but broader issues of the Chinese social and political development.

I think it is unfortunate and paradoxical that despite what I see as a rather sclerotic and old-style official response to SARS, China's society has become more open than ever. Indeed SARS spread as rapidly as it did precisely because of China's expansive interaction domestically and with its international partners. So something, obviously, is going to have to change in the way Beijing approaches these questions. I think the next 90 days or so are going to tell us a great deal, and I would urge the Commission to keep an eye—as this outbreak subsides somewhat—on whether or not we do see continued focused attention, resources, and opening for China in dealing with other, not only social and health issues, but its lengthening lists of socioeconomic challenges.

Another lesson, obviously, that we take away from this is something we've known, but I don't think has reached international attention, and that is the ailing healthcare capacity, which Dr. Henderson has already informed us about. This is a very serious problem, and one I think which does offer numerous opportunities for both non-governmental organizations and governments to work with China to help expand healthcare capacity in China.

Third, another lesson to mention is somewhat disturbing to me, as we have seen it in the HIV/AIDS case as well, and that is the unwillingness of authorities in China, and particularly outside of the healthcare set of ministries and especially at the local levels, to work with foreign partners who are seeking to assist in healthcare capacity building and other healthcare issues in China. Again, I think this may be an opportunity for us to help build the capacities of those local and grassroot organizations that can help bridge the gap between foreign providers of assistance and local authorities.

Second, let me turn to some near-term implications, again, understanding that we don't know the full extent of this problem yet. I am somewhat disturbed that the official Chinese response to SARS in the early stages does not bode well for how the government is going to respond to other new, and, in my view, even more serious public health challenges which the country is facing. I cite particularly in this regard, the problem of HIV/AIDS, where I think we see a good number of similarities between the response to SARS and the response to that disease, meaning denial, reluctant ac-

knowledgment and hesitant mobilization of resources, and reticence to deal with the international community.

Other looming epidemics are out there, and—as we can see as China globalizes—do pose problems for its partners, and we should watch carefully how China responds and whether or not there can be other forms of boosted assistance. Such as problems of other types of atypical pneumonias, hepatitis, and HIV/AIDS are spreading in China and do pose issues not only inside China, but internationally.

Another obvious near-term implication is the economic downturn for China. This is not directly a healthcare-related issue, but it does have an impact on the international economy, something that concerns us all, especially at a time that we are teetering on the brink of an international recession. When we hear figures of China's SARS related downturn of its GDP perhaps going down as much as 2 percent, that is going to have an enormous impact on the global economy. Even if China is able to ride through some of the economic implications of the SARS outbreak, many of its major partners are suffering as well, economically, such as Singapore, Hong Kong, and Taiwan, and that, in turn, will affect the viability of the Chinese economy going forward as well.

Let me conclude, by just looking ahead. As I have said already, we need to watch very carefully how China in the next 60 to 90 days chooses to deal with other public healthcare challenges once the SARS issue seems to be diminished somewhat, or at least off the day-to-day front-page headlines. We should be watching for a continued denial and inaction short of international outcry or senior-leadership intervention. We have already been made aware of the weakening public-healthcare capacity to monitor, diagnose, prevent, and treat emergent disease outbreaks in China—the capacity problem is really enormous—and continued reluctance to collaborate effectively with foreign partners.

Our first priority must be to implement more transparent, accurate, and coordinated public healthcare management and communication. In this regard, I believe healthcare-related quasi- and non-governmental organizations could be more effectively utilized to monitor and improve methods for the prevention, treatment, and care of disease. For these to succeed, China's new leadership must commit to raising the political priority of public health on their agenda of socioeconomic challenges as Dr. Huang has already mentioned.

Second is the capacity problem. At a very fundamental and basic level, far more will need to be done to develop more well-trained professionals who can properly diagnose, treat, and care for persons afflicted with emergent epidemics in China. And again, I see a role for grassroots and community-based organizations that could be effective partners in this effort, if well coordinated and if given adequate leeway and resources internally.

Last, much more can be done between China and the international public health community. They have a shared interest in scaling up cooperative programs. There are numerous international healthcare related programs in China, but most of them are run on a very small scale at a pilot level. And one of the problems of scaling them up again on local levels is precisely the political one, espe-

cially if they are operated by NGOs or dominated by foreign donors. The central authorities or even provincial authorities are more reluctant to see those programs expanded to a larger scale for political reasons.

But obviously, major donor nations need to reconsider channeling development aid to focus even more on public health programs in China. In the end China needs to know that as one of the worlds largest economies and as an inspiring great power, it will need to show a far greater commitment to working with international partners and taking its public health challenges much more seriously. In this regard, I will just note that I was very encouraged to learn that on a basis of a telephone call between Vice Premier and Minister of Health Wu Yi and Health and Human Services Secretary Tommy Thompson, we have committed an additional one-half million dollars to help China in the near-term on the SARS issue, but the types of assistance that are being provided—to provide for training; to provide for capacity building and laboratories—is going to have a far larger impact. If anything, I would encourage as one of our recommendations coming out of this that our government devote even greater resources to China in this regard. Thank you very much.

[The prepared statement of Mr. Gill appears in the appendix.]

Mr. FOARDE. Bates, thank you very much.

We are going to let our panelists catch their breath for a minute while I make an administrative announcement or two. Our next issues roundtable will be 3 weeks from today, on Monday, June 2, here at 2:30 p.m. in this room, 2255. We will be sending out an announcement a bit later in the week about the topic and panelists. We hope that you will put it on your calendar and will join us.

In addition, as one aspect of our topic today, we published last week a staff paper on SARS and its relationship to the free flow of information in China. Copies are available on the distribution table outside. If they are all gone, you can find a copy of the paper in both HTML and PDF format on the Commission's Web site, *www.cecc.gov*.

We have now turned to our question and answer session. As we have in the past, we will give everyone here on the panel table representing the commissioners of the CECC a chance to ask our panelists questions for 5 minutes, and hear the answer. We will do as many rounds as there is still interest and our panelists are still holding up, or roughly 4 p.m., whichever comes first.

I would like to begin by asking Professor Henderson to elaborate a little bit. At the end of your presentation you were talking about the strengths and the weaknesses of China's public health system. I wondered if you would take another minute for the record to tell us what you think the real strengths and weaknesses are and what the relationship might be, or what the United States might do to help strengthen the system?

Ms. HENDERSON. OK. Some of the strengths are derived from the earlier system which did set up a public health infrastructure. As many of you know, this system is a multi-tiered system with high-level city hospitals developed and public health departments that are under the national China CDC control down to districts and counties, in the rural areas, townships, and the villages. In the

post-Mao era resources were shifted away from the countryside where resources were mainly devoted under Mao Zedong. And that is why it was one of the biggest successes of Mao, that he did what almost no government has ever been able to do—focus resources in rural areas, limit the development of high-technology medicine, and limit contacts with the outside world. So, you didn't see any fancy machines imported into China during that whole time period. Nevertheless, this policy resulted in really letting the urban health infrastructure go.

So, the big shift after Mao was toward devoting resources into catching up, modernizing medicine—science, technology, and medicine—as part of the foreign modernization programs. The strength, though, is the infrastructure. If you think about it in comparison to Africa and trying to put treatment programs into Africa, the contrast is still quite vivid. Being able to put treatment programs, prevention programs, health education programs into rural China is not as possible now because the township level hospitals and public health functions became quite weak in the post-Mao era. But, the infrastructure exists. And what the Chinese have been working on is re-instituting the strength of that rural township hospital and public health department control over public health functions at the very, very basic level. That wouldn't be possible if they hadn't had the prior system. So that is a really big strength that can be built on. I would say that everything that our government can do to recognize that it is there, and that they have a program in place, and to assist with that would be excellent.

The other strength is that there have been so many advances in infectious disease control in China, many of which are ignored. As people look at health statistics in, for example, hepatitis, almost 10 percent of Chinese have hepatitis B. Hepatitis C is also epidemic. This is transmitted through sex and blood. The Chinese developed a vaccine for hepatitis B. There is almost no vertical transmission now because they were so successful in implementing that vaccination program. The problem is the blood supply and hospitals. Dirty needles are a big source of transmission, still, of hepatitis. So, the blood supply which was also implicated, of course, in HIV transmission is also something that has been a serious hazard in terms of hepatitis. And that is the origin of most of the increase in the epidemic.

So, if we say, "the Chinese, their system is defunct. And look, hepatitis is out of control." Well, yes and no. And I think that kind of recognition of the strength of classic infectious disease work, work on vaccinations and so on, is something that our government should do and not accept more general and sometimes superficial comments about the state of health in China. Health in China is generally improving every year. If you look at morbidity and mortality rates, particularly mortality rates—if you look at infant mortality rates, the disparities between urban and rural areas on the aggregate, at least, are decreasing.

Mr. FOARDE. I would recognize my partner in directing the excellent staff of the Commission, David Dorman, who represents Senator Chuck Hagel.

Mr. DORMAN. First of all I would like to thank each of our panelists today on behalf of all the commissioners for taking the time to

try to educate us on this very, very complex subject. I know the commissioners themselves are extremely interested in this subject and appreciate the time you have taken today to help us understand it.

One thing I would like, perhaps, Dr. Gill and Dr. Huang to address is helping us understand the issue of secrecy. What we have seen written and heard discussed, on the one hand, suggests that the Chinese reaction to the SARS crisis was somewhat reflexive, in the sense that the initial reaction of secrecy is the only answer the system could have given. There are others who look at this a little bit differently and suggest that perhaps part of the problem was a public health system that was not functioning fully. In other words, if the Chinese leadership had had more information, perhaps they would have reacted differently. I am wondering if each of you will comment on this. Do you feel the system itself, as it now exists, could not have reacted differently, even if the public health system was in some way more functional? I am recalling Dr. Henderson's comments that even 20 years ago it may have been better functioning than today? Could the current leadership have reacted differently if they had better information?

Mr. GILL. I think it is both of those problems that you cited. It is not one or the other. So, in combination, you have a synergy that makes things a lot worse than they should be. Not only is the data collection and surveillance and epidemiological capacity of the country poor, especially in rural areas, but there is also the natural reaction of bureaucrats everywhere that no news is good news, and bad news you don't expose if you don't have to. And then you have the overlay in China of potentially very serious consequences for persons who reveal information that is considered secret or somehow classified. So, you really have a synergy of both.

To answer your question, though, that you asked in the second portion, would things have been different if they had had greater access to information? Yes, I think it would be. I mean, I think we are looking at leaders in China today that have over time recognized the need to be responsive to society and to try and be more open and try and be more accountable. I am not going to exaggerate any of this, but there is movement in that direction, and that is all very positive. As the leadership recognizes that its legitimacy relies upon retaining an image for the people of being responsive and accountable to a degree, they need to be more so. Thus, I suppose if there had been more information available, we might have been able to expect a little bit more rapid response. But there wasn't. And on top of that, there is the secrecy and less-than-responsive action. So, unfortunately, in China I think today still and even after the SARS debacle, you have the worst of both worlds: both a lack of information and a tendency toward secrecy.

Mr. FOARDE. Dr. Huang, I will give you about 2 minutes to say a little, if you would.

Mr. HUANG. OK. I agree with Dr. Gill that the Chinese Government could act differently provided that there were some changes in the Law of Prevention and Treatment of Infectious Disease, because that law, which was enacted in September 1988, had some major loopholes. First, under the law, provincial governments are allowed to publicize epidemics in a timely and accurate manner

only after being authorized by the Minister of Health. Second, atypical pneumonia was not listed in the law as an infectious disease under surveillance. Therefore, local government officials legally were not accountable for the disease. It is true that the law allows addition of new items to the list, but it does not specify the procedures through which the new diseases can be added.

That being said I still believe that there are some deep-rooted systemic problems in the Chinese political system. First, as I just presented, China lacks the decentralized system of oversight that we have here. And second, it is about the regime's legitimacy. The manipulation of data actually helps shore up the regime's legitimacy. Third, this is about a political system that is very secretive. In fact, according to China's 1996 implementation on the State Secret Law of 1988, which handles public health-related information and any such diseases should be classified as a state secret before they are announced by the Ministry of Health or authorized by the Ministry. In other words, until such time that the Ministry chooses to make public information about the disease, any physicians or journalists who report on such a disease would risk being prosecuted for leaking such secrets.

Mr. FOARDE. Very interesting point. I would like to go on now and recognize Andrea Yaffe, who represents Senator Carl Levin, a member of our Commission. Andrea.

Ms. YAFFE. Hi. I think Dr. Gill touched upon this issue regarding the recent appointment of Vice Premier Wu Yi. I am wondering whether some news reports are accurate and if you think she will be a catalyst for more openness? What can the United States expect from her leadership? Do you agree with her appointment, and how do you think she is going to handle that position? Any of the speakers.

Mr. GILL. I take her appointment generally in a very positive light. We've argued in other contexts that often for real action to be undertaken in China, it requires a higher level of senior leadership attention. Madame Wu is a vice premier, and a woman of great resources, political and otherwise, and who has a pretty strong reputation in China, and importantly, internationally. So, I think another silver lining in all of this is that we see appointed to this very important post of Minister of Health a person who brings to her position a great deal of clout, far greater politically than her predecessor, Minister Zhang had. So, I think we can hope. The pieces are being put in place for a more robust response from China on its public health agenda, and I think Madame Wu will be a very good partner to work with.

Mr. FOARDE. Does another panelist want to address that question?

Mr. HUANG. I think I could comment on Professor Henderson's remarks. I agree with Professor Henderson, actually. While pointing out the weakness of the health system in China, we should also recognize the strengths of that system, that is, as Professor Henderson has said, the infrastructure, basically, is still there. It's just that they need money. They need to increase government financing to help boost the capacity of China's health system to deal with all of these public health problems.

And also, as Professor Henderson pointed out, in terms of the public health status in China, we have indicators of health status like mortality rate, life expectancy, under five mortality rate, infant mortality rate. In fact, there is no sign suggesting that there is a measurable decline in China's public health status in that regard.

And also I wanted to add that the government has already taken some positive steps to improve the health system in China, including the rural health system. Actually, what I have found is that they are trying to revitalize the Maoist health system by endorsing officially the so-called, Cooperative Medical System, to ask officially to put more emphasis on the countryside. These are all positive signs that I think we should recognize.

Mr. FOARDE. Thank you. We've got about a minute. Andrea, do you have another one?

Ms. YAFFE. I was also wondering—I think this was also briefly touched on—with the clampdown on universities, with the clampdown on all tourism, how long do you think it is going to take for the economy to start getting revitalized? How long do you think the quarantine can actually last?

Mr. GILL. I don't think anyone can make a prediction on that. What I really wanted to touch on in testimony was that we had a session over at CSIS this morning and some responses were generated. So, maybe I can convey some of them. One is that some experts believe that before the data and epidemiological surveillance in the countryside begins to kick in, we are seeing a little bit of a slowdown in the daily prevalence, or at least of new cases. Some experts believe that once we are able to pull data accurately from the countryside, we will see an upswing.

There is even evidence that SARS does not affect children in a strong way, but they can remain carriers, so that they can infect others who would fall ill to it. So, there is a lot that just isn't known. If we are going to go by the World Health Organization's [WHO] standards of when we can go back to the country or feel safe to go back to China, it will be a very, very long time. They have very rigorous standards for when these advisories can be pulled. And with 5,600 Chinese infected and counting, it is going to be a lengthy period of time. I mean I think we should certainly be thinking in terms of several months, if not much longer. I don't think anyone is really ready to make a very accurate prediction because we just don't know.

Mr. FOARDE. And you are out of time. So, we will go on and try to find out something else. I now recognize our friend and colleague, Tiffany McCullen, who represents Under Secretary of Commerce Grant Aldonas, one of our Commission members.

Ms. MCCULLEN. Thank you, John. And I would like to also thank the panelists for their thoughtful remarks earlier. I would like to go back to some of the comments that Dr. Gill touched on as you were closing out your remarks. You were talking about the economic downturn. I was wondering if you would elaborate on that a little bit further and maybe if you have any information on investment, how you feel SARS may affect foreign investment in China, and please open it up to the other panelists also? Thank you.

Mr. GILL. Well, obviously, the most hard hit sectors of the Chinese economy are going to be some of those that generate a good amount of foreign exchange. Certainly tourism and service industries are going to be very heavily affected. To my knowledge, at this point, however, the basic production base that makes China the export platform to the world has not been affected in any serious way. So, it would seem that on the fundamentals China remains the same attractive place that an investor would have found in China half a year ago. So, I don't think that is affected.

Now, what is funny and what is not measurable, is the issue of confidence. Whether or not you feel, as investors, beyond the fundamentals that your gut instincts are right in investing in a country like this for fear that you might lose some of your investment owing to the spread of this epidemic. At this stage of the SARS epidemic, again, without knowing the full extent of whether we are going to see a resurgence in the winter, the numbers, as a part of the overall Chinese population and economy, are still relatively small. And I think it is largely a perception in our gut understanding as outsiders that has led to this downturn.

I would suppose that if things could be brought under control and some of the higher numbers could be diminished, or if the WHO advisory could be lifted before the end of this year, potentially, or early next year, I would only see this as a near term economic hit for China. But all of that is very speculative, because we just don't know. I hope my other panelists will be able to join me on this.

Mr. FOARDE. With the understanding that none of you is an economist, and not Alan Greenspan either, you can say what you think, please.

Ms. HENDERSON. I want to reinforce the idea about how little we know. There is no simple diagnostic test. We have some numbers for probable cases out of China. We don't know if those are true. We don't know if they are high. We don't know if they are low. But, what I want to point to is the ability of infectious disease to strike terror in the heart of every human. The kinds of things that we want to worry about are the stigma and the discrimination, and the unthinking application of categories of diagnosis before they are ready, of actions—not so much taken by the Chinese Government, as simply perpetuated in the media and fear mongering. I think we need to be really careful about that. And that is not just SARS. That is emerging pathogens. And, of course, this is not our last emerging pathogen. They have been increasing in the last few decades, in the world. So, I think the whole global community needs to take a look at how we present these things and try to introduce more thoughtfulness. But, basically, we just don't know right now.

Mr. HUANG. I will just be very quick. There is no doubt that the SARS epidemic is going to hurt China's economy. There are concerns that the epidemic is going to wipe out economic growth in the second quarter, and possibly reduce the growth rate for the entire year to about 6 percent, which is well below the level that the government says is required to serve the millions of new workers who need jobs. In the meantime, this is not necessarily a bad thing, considering that the economy for the first quarter was about 9.9 per-

cent, which some economists believe is overheating. So, that is not necessarily a bad thing, because the fundamentals are still there.

Mr. FOARDE. I would recognize our colleague Susan O'Sullivan, who represents Assistant Secretary of State for Democracy, Human Rights, and Labor, Lorne Craner. Susan.

Ms. O'SULLIVAN. Thank you, John. I would like to return a little bit to a question that was touched on earlier, and that is the disparity in numbers of cases in major Chinese cities. I am reading State Department reporting on—I think we are reporting seven cases in Shanghai, for instance, and hundreds in other cities, like Beijing. I am wondering if there is some explanation in the way the disease spreads, or do we have to assume because Shanghai is a major financial center, that there is still some degree of suppressing the numbers? It strikes me as odd every time I see these big differences in numbers.

Ms. HENDERSON. This seems a little bit of a broken record, but I don't think we know why it has spread, because the risk factors which predict the spread of this disease are still not really clear. It has been reported in major cities throughout the world. It has been reported less in rural areas, but whether there is something about being in a city, as opposed to being somewhere else, which is conducive to the spread is not totally clear.

There must be something about the migration patterns of particular people from Guangdong to Beijing. In my view it is more luck that Shanghai doesn't have a lot of reported probable cases.

Mr. HUANG. I agree with Professor Henderson that it is pure luck that largely accounts for the low incidence rate of SARS in Shanghai. But, the Shanghai Government and the Chinese Government as well, also provided another version of the explanation. That is the Shanghai Government capacity is higher than other local governments. The official media features a story that when the Shanghai Government located a SARS patient, within 6 hours they had found and quarantined 100 people with whom the patient had direct and indirect contact. That is quite efficient, if that is true.

Mr. FOARDE. I would recognize our colleague, Susan Weld, who is general counsel of the Commission.

Ms. WELD. Thank you, John. I am thinking about the problem of information in a large healthcare system such as China has to have. And the first thing you mentioned, Professor Huang, is the law that makes communicable disease a state secret. I've been wondering whether one way of rebuilding external and internal confidence in the state will be to change that law. I wonder if that would solve the problem. But, I am also thinking about professional ethics and doctors and public health practitioners in China. Is there any sense of professional ethics that would require them to publish or to speak out on issues like SARS? I know there has been really courageous action by the doctor in the military hospital in Beijing, but can you tell me more about that? Not just you, Professor Huang, but also Gail and Bates.

Mr. HUANG. Well, in terms of the changes in the law, so far we haven't found any indication that the government is willing to consider changing the State Secret Law, and also its implementing regulation with regard to the handling of public health-related in-

formation. Technically, they could do this very swiftly. They acted very fast by adding SARS as a disease under surveillance under the Law of Prevention and Treatment of Infectious Disease. They could act in a similar manner. It's just that we haven't seen any discussions in that regard.

Also, in terms of professional ethics, I think that many—actually, in the Guangdong case, evidence suggests that many physicians were informed about this disease before January 31, the Chinese New Year. Apparently few people there spoke out. This, again, is probably because of the State Secret Law, which prohibits people from speaking out, because they will risk being persecuted by the government. But fortunately, we have Dr. Jiang who spoke out. In that regard, I don't have much information to share with the Commission.

Ms. HENDERSON. I think a lot of the weaknesses of the system don't need my reiterating, and I don't disagree with them. But, I would say that there is probably some important reasons that there needs to be central control for the announcement of a major new epidemic. So, while I share the concerns, perhaps, that this kind of control might lead to suppressing information, at the same time, I don't think that the U.S. local public health departments can willy nilly announce a new epidemic without some kind of OK from the Centers for Disease Control and Prevention [CDC] as well. Epidemics introduce new kinds of issues that I think abrogate some of our normal feelings about human rights.

Second, in terms of the professional ethics, sometimes it's reported in the press and other places that physicians and scientists in China never feel free to report any real statistics. For example, sexually transmitted diseases, which have been epidemic during the 1990s and into this era. The initial reports on those were very hesitant in the medical literature. People might participate in studies, but not want their names on papers, because they were a little unsure that it would be the right thing to do for them in their careers in China. So that is real.

At the same time, I feel that—particularly with the advent of a lot of international collaboration—there has been a real change among professionals in China in both the medical and the scientific communities. I've seen that myself, personally, over the years with all my work in healthcare. Now I spend a lot of time at the China CDC and the new AIDS Center. I just think it is a different world now. It would be great if I could say to you, "Here are the structures and the avenues by which people are able to do this." I'm not sure I can recount that. What I can do is look back in history and say, "You thought that there was nothing going on about HIV, but there was. And here it was in the biomedical literature. The transfusion medicine literature was full of it way before the New York Times found out."

Mr. FOARDE. Bates, did you want to take a crack at that?

Mr. GILL. I have one very quick comment. And that is that laws on the books are great, but obviously, they don't make any difference if they are not enforced or if the population doesn't believe that they will get equal treatment under that law. So, even if they change the law to allow for some sort of more open reporting mechanism, will a lot of people feel confident enough to operate under

it in China? That's the whole issue we are examining here: the extent of the scope of rule of law in China.

Just one other comment I wanted to add to this so let me stop there. I know we are short of time, but thank you.

Mr. FOARDE. Let me go on and try to begin to tie all of this together with an overall question. You have all sort of alluded to the answer, but I would like you each to comment on it more specifically. In the last couple of weeks, we have heard some observers in the United States suggest that the SARS crisis may be, or already is, or may become, China's Chernobyl. The theory being that the Chernobyl disaster was the first in a set of events that ended up with the collapse of the former Soviet Union. What are your thoughts on the impact of this SARS development on the possibilities for political change in China? We can start with Dr. Huang if you would like to step up to that question.

Mr. HUANG. This analogy of China's Chernobyl is very appealing, but I think it flies in the face of reality. First, we should realize that, in terms of the economy, China's economic situation is much better than Mr. Gorbachev had in the former Soviet Union. China's economic growth is very strong and it is probably the fastest growing economy in the world. It is a bright spot in the global economy with all that global recession going on. Second, we haven't seen any apparent split in the Chinese leadership. There might be some policy differences, power struggles, but as President Jiang used to say, "We are all in the same boat." So, they may eventually compromise and still muddle through the crisis. I will leave it to the other two panelists to comment.

Ms. HENDERSON. At that time, one of the things about Russia was not only that its economy was nose-diving, but also its actual health indicators. Life expectancy was declining. It was hard to believe that the statistics were right. Life expectancy had gone from 70 years or above down to, now, below 60 for men. So much was wrong with that system then and also now, that I think it is just not comparable. There is a lot of strength now in the Chinese system.

The way I see this is that this event mobilizes a lot of forces that have already been at play in China during the 1990s. Both panelists brought up correctly that the public health system was the "low person on the totem pole" for many years. And now they are going to be boosted up, and they are going to be implementing things and getting assistance for things that they have been working on but have been under-funded. So, I see this as a wonderful transition opportunity as opposed to a revolutionary event.

Mr. GILL. I would agree with both of my fellow panelists. I think the Chernobyl analogy is overdrawn. It may be a kind of Chernobyl-like transformation of the healthcare sector. That is to say we will see some important changes there, probably a real devotion of new resources, certainly in the near term. If Madame Wu Yi stays there, I would assume that she will see to it that she is able to bring her political clout to bear on improving matters, but does this mean a political transformation of the Chinese body politic? No. I don't think it does.

Another important thing to consider, and it is similar to lots of other socio-economic ills in China, is that there are pockets of some

unrest and unhappiness and disgruntlement here and there, and sometimes it does rise up to localized violence in places, but there is no indication that there is going to be a systemic uprising of any kind as a result of SARS. The one comment that I wanted to make before, that I recall now is that maybe SARS will make a demonstrable case for those who argue that greater openness is not a bad thing, and it is good to have laws that make sense and are enforceable and are known to the people, what their rights are and aren't, that gives people a greater confidence to speak out when they think they can. Those who want to advocate that sort of approach in China can certainly look at the SARS case and say, "Look at what happens when we don't have this openness." Again, I don't see that as becoming system-wide, taking on board of that kind of approach, but rather in certain cases where it can be demonstratively shown, like in epidemics, for example.

Ms. HENDERSON. Could I just add one thing real quick?

Mr. FOARDE. You've got plenty of time.

Ms. HENDERSON. If we think about HIV versus SARS, one of the things about HIV is that even when it moved into the provinces because of the infection of commercial plasma donors, even then, the Chinese are still able to think of it as a disease that is not going to affect them in a major way. SARS is different. This is really different. Healthcare workers are affected first; people in cities; people who are near the centers of power. I think for public health it is a disaster, but it is also an opportunity to lobby.

Mr. FOARDE. Very useful. Let me ask Dave Dorman if you have another question for the panel?

Mr. DORMAN. Thanks, John. We touched upon several times the fact that the basic pieces of the preventative and curative healthcare structure are in place. I think some of you suggested that, perhaps, the SARS crisis may lead to some change in political commitment, and through it, an increase in the inflow of cash into that structure. What other factors for improvement should we be looking for? For instance, in terms of managing a very large health structure like this, are there presently sufficient numbers of experts and technicians in China to make it happen? And are there other factors that we haven't talked about yet? Is political commitment from the leadership and an influx of cash enough? Or are there other pieces that we should be looking for as we review what happens in the next 12 months or so?

Mr. HUANG. I think I can answer that question. I think that such a commitment is important. More healthcare financing is also important. But, it is equally important to strengthen the bureaucratic capacity in managing China's health system. What we have found here is actually two problems. First the lack of coordination between different bureaucratic organizations. We have evidence that suggests—in 1993, for example, the Minister of Health wanted to strengthen rural healthcare by promoting a primary healthcare and assigning targets that were to be fulfilled by local government officials. But they had the Ministry of Agriculture step in and say, "No, we are going to eliminate these items, because they are going to increase the peasant burden." So, you can see this lack of coordination between different bureaucratic organizations.

And so is the case in the recent SARS outbreak. What we have found here is lack of coordination between the central ministries and the local governments. A good example is the Ministry of Health in Beijing actually learned about what was happening in Beijing in March and they wanted to do something, but Beijing city authorities basically didn't want to have involvement from the Ministry of Health. They said, "We can handle it." So, this is another example of coordination between different bureaucratic organizations.

The second problem is the lack of regulatory ability. Unlike the United States, China doesn't have a very strong, very capable Food and Drug Administration [FDA] that regulates foods and pharmaceuticals. Officially they have this pharmaceutical administrative bureau, but that is the one that doesn't have the teeth. The State Council wants to expand the functions of the State Pharmaceutical Bureau to make it China's FDA, but they haven't specified what they are going to do to make it really happen.

Ms. HENDERSON. I am not a political scientist, so I am not going to talk about the lack of coordination between the different ministries and the top and the bottom. I would comment, however, on the scientific and technical personnel, which are in short supply, but incredibly talented, and that is the bottom line. There are not enough people, the people are remarkably overburdened at the top. They are talented, dedicated professionals but they are in short supply. But, checking the blood supply, which is one of the major reasons there is such big HIV epidemic they knew what to do, and they have been working on it, but there are a certain number of things that they couldn't do because the tests are too expensive in Xinjiang Province. Because a cheap one isn't sensitive, isn't specific, there are a lot of missed cases, but they can't afford the expensive ones. And it is that level of difficulty with resources that is very nuts and bolts. So more trained people and devoting a lot of resources technically to the capacity to do testing, surveillance, making the system really work. It is expensive.

Mr. GILL. Let's not forget we are talking about 800 to 900 million people who live in remote, often very backward parts of China. It strikes me that—especially on the HIV/AIDS side of things—this is not going to get taken care of through a formalistic, overarching, top-down, massive public healthcare system. It is not going to happen. They are going to have to come up with some ways of managing, especially in these very far and remote areas through some sort of localized, even family-based forms of treatment and care. Mostly care, unfortunately, because you are not going to have qualified persons. And then the talented ones get out and go to where the money is in the system. So, to the degree that your question is asking how are we going to manage this at this very low grassroot levels, where the vast, vast majority of the Chinese population lives, that is going to be very, very difficult. I think it is going to have to require some more innovation and a little bit more loosening of the strings, if you will, to come up with more localized, community-based, even family-based answers. As Dr. Henderson said, the problem is just enormous. And the challenge is extremely expensive.

Just as another aside, how about delivery of drugs to the patient? Let's say you did have all of the drugs you wanted. How are you going to get it to the point of care in a place like China? It's a huge problem, especially in the countryside.

Mr. FOARDE. Susan Weld.

Ms. WELD. Yes. That just makes me think of the possibilities that NGOs could undertake in different parts of China, and maybe in some of the more remote parts. If the laws were reformed to make NGOs easier to establish, then they could provide some of this difficult work or treatment and care for the people who are living with AIDS and the people living with the after effects of SARS. Does anybody think that this will happen? Is that something which is a hopeful way of dealing with the after effects of this disease and other diseases like it?

Ms. HENDERSON. Well, there are a lot of NGOs and international aid organizations already working on these things in different ways in China. I think there is a pretty good coordination. Everybody knows what the others are doing. I would like to say that in the last year the Chinese Government has stepped up to this responsibility, and said that 100 counties that are hardest hit with HIV/AIDS will have treatment programs there.

NIH and AIDS clinical trial groups—the units that have been working on research and treatment in many medical centers across the United States—have also been to China, mobilizing to set up centers there to institute treatment programs. You really do need to learn to treat. You need to follow people. But at the same time, there is a demand from the local areas to get the training; on how to carry out treatment. I've seen that in meetings in China last year. So, there is a political will in the local areas and some help from outside, and now especially from the central government, to fund it.

I don't want to be too rosy. There is funding and then somebody goes, "Oh yeah, but we need to think about how much a monitoring test will cost." So it is difficult to find the money for every little incremental bit.

Ms. WELD. I guess I am thinking of the connection between one problem or SARS and the possibility that civil society will develop using NGOs if you want to call them that, or social organizations, "shehui tuanti," that level of development and capacity-building. The hope would be that, instead of having to find outside money to put in in the future these kinds of organizations will be self-sustaining on the local or national level.

Ms. HENDERSON. I have only seen a few NGOs that deal with AIDS. Unfortunately, I think they find that they encounter a lot of resistance. There is a lot of stigma. There is a lot of difficulty in talking about some of the risk factors for AIDS, until very recently, in highly stigmatized groups. So, I haven't seen that as being an avenue. I'm sorry to say that I haven't.

Mr. GILL. Anything that comes close to what we might call an NGO in China is a relatively small operation and certainly doesn't have the capacity to undertake nationwide programs. I think in the near-term if we are going to look to quasi-governmental groups to have a national impact, it would be the so-called social organizations that are government organized organizations. They are one or

two steps removed from the line ministries, but often have quite an extensive reach down into the provincial, county, and even village levels. Maybe they wouldn't be treatment and care providers, but they certainly could be effective in terms of preventive messaging and awareness; transmission belts; passing information. Maybe they could be empowered to a greater degree in the Chinese system, because they really are government organizations, even though they do have authority connected to government ministries. Maybe the way to go in the near term is to encourage a process of empowering those sorts of organizations.

Mr. FOARDE. We are just about out of time for this afternoon. So, if you would, I would ask each of the panelists to spend a couple of minutes making a final statement if you have something to say. If you don't, that's fine.

Ms. HENDERSON. Thank you. Now, of course, I don't want to repeat the earlier things I've said. There are a lot of strengths and weaknesses. The strengths come from earlier era, and also from most recent developments, partly as a result of international collaborations, in China opening up in great ways to the rest of the world. Weaknesses have to do with the economic reforms and the destruction of a lot of public health programs.

I think the main thing I want to say is that this is an unprecedented event, certainly in our recent history. I think it is shortsighted to come down too hard on the way the Chinese have dealt with this crisis. I am not sure how our country would have dealt with it had we actually had an epidemic here. We don't know whether we did or not since we don't know if we had cases.

I think this is an opportunity for the system to reform, to learn important lessons, lessons that can't be ignored, that they ignored, unfortunately, with AIDS. This was because they could tuck it into Xinjiang, tuck it in Yunnan, blame the drug users and so on, and not really confront the weaknesses in the system to treat. Plus, the world changed with regard to treatment for AIDS patients in the year 2000 with the Durban Conference. So, now we think people with HIV have a right to treatment. That was not part of the world view before 2000.

So, there is a lot that has changed dramatically. But, I also think that in our media and in our response to China, we have an opportunity now to be supportive and nonjudgmental. I would advocate for that approach because this is an extraordinary challenge to any system. Even a system that functions perfectly and has all bureaucracies talking to each other and so on. It's just unprecedented. I would advocate that we be humble, because we have a lot of problems ourselves. We haven't done so well with infectious epidemics. I know that sounds a little like seeing it through rose-colored glasses. But I think that this approach could get results from the Chinese Government.

Mr. HUANG. I would like to talk a little bit about the importance of international actors in setting an agenda for the Chinese Government. The recent agenda shift, to a large extent, was caused by the strong international pressures exerted by the international media, the international organizations like WHO, and foreign governments. And there is an indication that the Internet is increas-

ingly used by the new leadership to solicit policy feedback, collect public opinions, and mobilize political support.

In fact, it is very likely that Hu Jintao and Wen Jiabao, who are both Internet users made use of international information in making decisions on SARS. In other words, external pressures can be very influential, because Chinese Government leaders are aware of the weakness of the existing system, and have incentives to seek political resources beyond the system.

Mr. GILL. Just two quick points here. I think we are at a very interesting window of opportunity. It is too early yet to quite determine just how far and fast we can move with China to bring about and foster the kinds of changes we would like to see there. Not only in terms of the public health system, but also in terms of openness, transparency, and accountability. Opportunities like this don't come along very often. This is a huge issue inside China. It is something that is not going to be quickly forgotten, and the leaders are upright and at attention, and they are focusing on this like a laser beam. This is an opportunity for us to speak with them frankly, forthrightly, about the issue as a public health problem, but also more broadly as how it ripples out into the questions of socio-economic change and transformation that the Commission is trying to examine. I think this window is going to close before long. So, I think it is a good opportunity to follow through with that.

Second, in that regard, I would encourage all of the Commission members, to the extent you can to speak to your principals and make sure that even though they may not be Secretary of Health and Human Services Tommy Thompson, you can bring up public health issues and question the social safety nets with your Chinese counterparts. That is going to foster the kind of cross-bureaucratic attention to this issue in China that is so badly needed. So, it is not just health issues. I mean, if the Secretary of Commerce goes over and speaks to his counterpart, and bullet point two—you know right after WTO bullet point—is why the collapse in social safety net in China is a threat to the world economy, that guy is going to listen. He is going to find one of his people to start working on this issue. Believe me.

So, we need to help the Chinese understand that this is not just a healthcare issue, that we do need to help foster that cross-bureaucratic interagency process. It will happen if our principles are going over there and raising these issues as something important to the United States.

Mr. FOARDE. Thanks to all three of you for sharing these views with us this afternoon. You are all extremely well-disciplined and extremely articulate, and thanks very much for that.

I would remind you that our next session will be on Monday, June 2, 2:30 p.m. in this room. The topic and panelists to be announced. I hope you will join us then.

With that, we will close this afternoon's roundtable with thanks to all who attended, to the staff that helped us put it on, and to our three panelists. Good afternoon to everyone.

A P P E N D I X

PREPARED STATEMENTS

PREPARED STATEMENT OF GAIL E. HENDERSON

MAY 12, 2003

MYTHS AND REALITY: THE CONTEXT OF EMERGING PATHOGENS IN CHINA

America's first images of China in the early 20th century were as the "sick man of Asia."[1] In 1948, the U.N. Relief Organization stated, "China presents perhaps the greatest and most intractable public health problem of any nation in the world." Two decades later, the dominant image of Mao's China was one of healthy, red-cheeked babies born to a nation that seemingly provided healthcare for all.[2] The real story is more complex than either of these images, but in a country as vast and varied as China, many realities are true. The recent spread of HIV/AIDS and now the SARS epidemic have placed enormous stress on the Chinese healthcare system, as would be the case for any healthcare system. To effectively assist the Chinese response to SARS, we must understand the forces that have shaped this system. This requires a small excursion in history, past and recent, to revisit remarkable achievements and the factors that have determined the current system's strengths and weaknesses.

What will the history tell us? (1) Public health, which includes disease surveillance, health education, environmental sanitation, nutrition and food hygiene, and maternal and child health, is not a money-making operation. The trends in China's recent history demonstrate that public health agendas require strong government support and resources; it is easier to accomplish them when market forces are held at bay—or at least not in direct competition. (2) China's current curative healthcare system, of hospitals and clinics, has been shaped by economic incentives in the post-Mao era that have encouraged the development of hospital-based high technology medical care. In concert with the move away from collective welfare and central administration, inequalities in access to services have increased. But the infrastructure remains and can be supported and strengthened by forces within and outside of China. (3) Infectious diseases often strike hardest at the most vulnerable groups, those with least access to governmental safety nets. This was true for HIV in China—and in all nations—and the fear with SARS is that weaknesses in the rural health system, particularly in remote areas, will make containing the disease much more difficult. Newspaper reports about poor quality hospitals or farmers who cannot pay for needed medical care tell an important side of the story, but focus attention away from other critical components. (4) If we are to effectively assist China's response to SARS, we must understand the sensitivity for any government of double threats to public health and the economy, and reject the accusatory rhetoric that has characterized much of the editorializing of recent reports. Instead, we must recognize and build on the work of responsible, dedicated professionals in China and the US, people who are best positioned to develop strategies to contain SARS and prevent the emergence of other deadly pathogens.

Public health was probably Mao's biggest triumph. Under his leadership (1949–1976), China experienced the most successful large-scale health transition in human history—a near doubling of life expectancy (from 35 to 68), the eradication of many endemic and epidemic infectious diseases, including illicit drug use, prostitution and sexually transmitted diseases,[3] that resulted in a gradual shift in the leading causes of death from infectious disease to chronic conditions.[4] This was not accomplished through great gains in per capita income, but rather by creating a closed socialist political economy that exercised control over industry, agriculture, and migration; redistributed income and wealth; and had the ability to set national and local prior-

[1] J Horn, Away with All Pests: An English Surgeon in the People's Republic of China (New York: Monthly Review Press, 1969); GE Henderson, "Public Health in China," in WA Joseph (ed), China Briefing 1992 (Boulder: Westview Press, 1992).

[2] V Sidel, Serve the People: Observations on Medicine in the People's Republic of China (Boston: Beacon Press, 1974).

[3] MS Cohen, GE Henderson, P Aiello, Zheng HY, "Successful Eradication of Sexually Transmitted Diseases in the People's Republic of China: Implications for the 21st Century," Journal of Infectious Disease 1996; 174 (Supplement 2): S223–230.

[4] WC Hsiao, "Transformation of Health Care in China," New England Journal of Medicine 310:932–6, 1984; GE Henderson, "Issues in the Modernization of Medicine in China," in D Simon and M Goldman (ed) Science and Technology in Post-Mao China (Cambridge: Harvard University Press, 1989); see also World Bank reports on China's health sector (1984 and 1989).

ities in healthcare. By focusing on broad distribution of resources and reliance on low-tech public health measures and "patriotic public health campaigns" that mobilized the population against environmental and behavioral risk factors, achievements were made in sanitation, maternal and child health, infectious disease surveillance, and vaccination; and China's three-tiered primary healthcare system became the WHO model for developing countries.[5] Most citizens had medical insurance through rural cooperative programs or urban workplace programs, although the level of coverage, quality of services, and overall health status indicators were never equivalent between rural and urban locations[6]

After Mao's death, the market-oriented economic reforms of the 1980s and 1990s transformed the nation once again. Incomes and productivity rose dramatically as agriculture and then industry were de-collectivized, and there was a general loosening of administrative authority over lower level units. Living conditions, diet, and health and nutrition outcomes all improved steadily.[7] This was in contrast to the Soviet Union where life expectancy actually declined, from 70 in 1986 to 64 in 1994, and has continued to decline thereafter. Major investments were made in urban medical services, long stagnant under Mao, as China turned to the West to help modernize its hospitals, technology, pharmaceuticals, and medical research and training; and these changes had a positive impact on health status as well.[8] In part, these were responses to the increase in chronic diseases, for which modern medicine had developed expensive, intensive interventions—conditions like heart disease, stroke, and cancer—which were all increasingly prevalent. In part, however, as World Bank and Chinese public health researchers have clearly documented,[9] the economic reforms created irrational incentives for hospitals to emphasize new technology and drugs because, as the government funded a smaller and smaller proportion of hospital budgets, profits on their use provided much needed revenue. In some cases, these reforms forced inefficient and poor quality hospitals to offer better services; in others, especially for the lowest level township hospitals in poorer rural areas, they have produced failing hospitals with little to replace them.

Public heath programs that did not generate profits suffered under the transition to a market-oriented system as well, with implications for health outcomes. For example, during the mid-1980s, funding for childhood immunizations in rural areas declined, which produced an increase in childhood infectious diseases. The government response, with assistance from the UNICEF, reversed this trend. My own research in a Shandong county public health department in 1990,[10] and surveys of rural health services in eight provinces during the 1990s,[11] document that collective benefits and funding for public health varied with the wealth of the region, but the hierarchy of medical and public health supervision continued to extend to clinics in villages and county towns. The top-down mobilization style of health education and prevention work was still effective against outbreaks of infectious diseases for which standard protocols existed (such as epidemic hemorrhagic fever, or Hanta virus); however, it was less capable of responding to new and more complex challenges such as risk factors for chronic conditions like hypertension which were not routinely screened. As many have observed, increased financial and administrative independence of local health institutions also undercut the ability of the central government to mobilize public health activities. This was demonstrated by the national-provincial conflict over response to the HIV epidemic, especially in areas with HIV-infected commercial plasma donors. This decentralization of authority and shift in concentration of resources from rural to urban areas, and from public health to curative medicine, has direct consequences for China's response to the SARS epidemic.

---

[5] RJ Blendon, "Can China's Health Care Be Transplanted Without China's Economic Policies?" New England Journal of Medicine 300: 1453–58, 1979.

[6] GE Henderson et al., "Distribution of Medical Insurance in China," Social Science and Medicine 41,8: 119–30.

[7] See appended tables from Zhongguo Weisheng Nianjian (China Health Yearbook) 2001 (Beijing: People's Medical Publishing House, 2001) reporting 2000 mortality rates and leading causes of death. See BM Popkin et al., "Trends in diet, nutritional status and diet-related noncommunicable diseases in China and India: The economic costs of the nutrition transition." Nutrition Reviews 59: 379–90, 2001, demonstrating the decline in malnutrition across rural China during the 1990s and rise in non-communicable disease.

[8] GE Henderson et al., "High Technology Medicine in China: The Case of Chronic Renal Failure and Hemodialysis," New England Journal of Medicine 318,15:1000–4, 1988.

[9] China 2020 series: Financing the Health Sector (Washington DC: World Bank, 1997)

[10] GE Henderson and TS Stroup, "Preventive Health Care in Zouping: Privatization and the Public Good," In A Walder (ed), Zouping in Transition: The Political Economy of Growth in a North China County. (Cambridge: Harvard University, 1998)

[11] China Health and Nutrition Survey (funded by NIH, NSF, Foundation, UNC, and Chinese Academy of Preventive Medicine), conducted in 1989, 1991, 1993, 1997, and 2000.

Two economic trends thus characterize China during the reform period: (1) increase in aggregate income levels, and (2) increase in disparities in income distribution (income inequality in China now equals that of the United States).[12] In any economic system, both trends are related—and in complex and sometimes contradictory ways—to health outcomes.[13] On the one hand, increased income and wealth produce improved health outcomes. China's impressive gains in per capita income in the post-Mao era, and especially in the last decade, are correlated with improvements in many health status indicators: during the 1990s, overall mortality rates declined in both urban and rural areas;[14] between 1991 and 2000, infant morality dropped significantly, from 17.3 to 11.8 per 1000 live births per year in urban areas, and from 58.0 to 37.7 in rural areas; and maternal mortality rates declined as well, in rural areas between 1991 and 2000 from 100.0 to 69.6 per 100,000 women per year, and in urban areas, from 46.3 to 29.3.

On the other hand, inequality in income distribution is linked to unequal access to care and consequently to disparities in health status. Urban-rural health disparities are evident in the mortality figures cited above, although the gap is declining for infant mortality.[15] Such highly aggregated health status measures often mask significant differences between geographic and sub-population income groups,[16] however, and this is certainly true for China's border and minority regions where mortality rates are much higher. In addition to income and geographic location, the strongest predictor of access to healthcare is having medical insurance. In urban areas the percent with employment-based coverage declined between 1993 and 1998, from 68.4 percent to 53.3 percent; but the rural insurance programs that depended on the collective economy for funding collapsed almost entirely in the 1980s, and by 1998, only 8.8 percent of the rural population had coverage.[17] Initially, because medical care charges had been kept below cost through price controls, loss of insurance did not create widespread hardships. However, as medical services improved and charges rose steeply during the 1990s, paying for medical care became increasingly burdensome to the poorest citizens.[18] Data from surveys during the 1990s document a decline in rural, compared to urban, inpatient admissions.[19] and anecdotal reports suggest that many do not seek care due to the financial burden. During the 1990s, one of the most researched topics in healthcare in China was reform of health insurance, and pilot insurance programs were initiated in a number of urban and rural areas.[20]

In a developing country with 1.3 billion people, it is not surprising that remote rural areas in China lack resources to respond to HIV or SARS. Yet, one positive development appeared in 2002, prior to the SARS outbreak, to address these well-recognized inequalities. A program to rebuild rural health infrastructure, based on multi-ministerial coordination, was initiated. It includes: (1) reconstituting rural cooperative insurance to cover 900 million farmers through a joint funding mechanism, with direct investment from central, provincial and local governments and from the farmers themselves; and (2) re-establishing rural township public health hospitals to implement and oversee public health activities at the township and village levels that had become "unfunded mandates" during the reform era. If imple-

---

[12] The World Bank reports the inequality index (Gini coefficient) for both countries in 1997 at about 40. Gini measures income distribution on a scale of 1–100. A rating of "1" would mean that that income is perfectly equally distributed, with all people receiving exactly the same income; "100" would mean that one person receives all the income. European countries' Gini coefficients ranged in the 20s and 30s; the highest were Brazil, South Africa, and Guatemala, at around 60.

[13] Moreover, extent of inequality itself seems to be related to poorer healthcare access and outcomes.

[14] Jun Gao et al., 2002, p. 22.

[15] Zhongguo Weisheng Nianjian (China Health Yearbook) 2001. (Beijing: People's Medical Publishing House, 2001) The comparable US figures are not too dissimilar: in 1997, IMR for whites was 6.0; for blacks it was 13.7, a greater than twofold difference (CDC NCHS website).

[16] Liu YL WC Hsiao, and K Eggleston., 1999, p 1350.

[17] Jun Gao et al., 2002 p. 26.

[18] Liu Yuanli, WC Hsiao, and K Eggleston, "Equity in Health and Health Care: The Chinese Experience," Social Science and Medicine 49,10:1349–56, 1999; GE Henderson et al., "Trends in Health Services Utilization in Eight Provinces of China, 1989–1993," Social Science and Medicine 47,12:1957–71; Jun Gao et al., "Health Equity in Transition from Planned to Market Economy in China," Health Policy and Planning 17 (Suppl 1):20–29, 2002.

[19] Jun Gao et al., 2002, p. 26.

[20] GG Liu et al., "Equity in Health Care Access: Assessing the Urban Health Insurance Reform in China," Social Science and Medicine 55,10:1779–94; G Bloom and Tang SL, "Rural Health Prepayment Schemes in China: Toward a More Active Role for Government," Social Science and Medicine 48,7:951–60; G Carrin et al., "The Reform of the Rural Cooperative Medical System in the People's Republic of China: Interim Experience in 14 Pilot Counties," Social Science and Medicine 48,7:961–72.

mented, these initiatives will have a positive impact on public health and disease prevention in the long term,[21] and the current dual challenges of HIV/AIDS and SARS add impetus to seeing that these programs are actually carried out. In the meantime, the government has established a special fund for those without insurance who seek treatment for symptoms of SARS.

Despite these measures, public health experts believe that China urgently needs international assistance in such areas as health surveillance, prevention, and control of communicable diseases. This is a role that the United States is well positioned to fill. The CDC and NIH have added personnel and funded projects in China, but, compared to other nations, the United States could be contributing much more.

In assessing the Chinese response to SARS, we are advised to turn to the lessons of AIDS for guidance.[22] Not surprisingly, the media has tended to highlight China's weaknesses in dealing with AIDS, particularly inaction in the face of HIV infection of commercial blood plasma donors during the 1990s in a number of provinces, as reported in the New York Times in late 2001. While I do not minimize the gravity of this part of the epidemic or the negative consequences of delay, these images distort appreciation of the strengths of the Chinese response, strengths that must be recognized and reinforced for the current system to respond effectively to SARS. For example, evidence that the epidemic was spreading to plasma donors was actually reported in the international and Chinese medical literature as early as 1995,[23] and in 1996, at the International AIDS meeting in Vancouver.[24] By the time of the first international AIDS conference in Beijing, in 2001, detailed epidemiology was being conducted and reported.[25] During this same time period, the daunting difficulties involved in protecting China's blood supply were documented in a number of publications. These included cultural barriers to an all-volunteer blood donation system, shortage of clinical transfusion specialists, and the high cost of technology required for accurate testing for transfusion-transmissible diseases such as hepatitis and HIV.[26] Efforts to improve the safety of the blood supply have been ongoing and increasingly successful; and in 2002, the Chinese Ministry of Health had publicly outlined a plan to include AIDS comprehensive prevention and care programs for plasma donors and other risk groups in 100 counties identified as hardest hit by AIDS.[27] These are extremely important developments, and deserve media attention as well as international support.

We excoriate the Chinese government for allowing the epidemic to spread through hundreds of poor villages. But we should ask how well other countries with far greater resources have performed? And we must also ask whether we apply a double standard to developing countries when it comes to public health performance.[28] In

---

[21] Personal communication with Dr. Yiming Shao, Chinese Center for Disease Control and Prevention

[22] LK Altman, "Lessons of AIDS, Applied to SARS," New York Times May 6, 2003 D1

[23] Ji Y, Qu D, Jia G, et al. "Study of HIV Antibody Screening for Blood Donors by a Pooling Serum Method," Vox Sang 1995, 9:255–6. Wu Zunyou et al., "HIV–1 infection in commercial plasma donors in China," The Lancet 1995 Jul 1;346(8966):61–2. Lancet is the premier British Medical journal. This first report featured a mother and her two daughters who tested positive, in the absence of any other risk factors except commercial blood donation, in rural Anhui Province, between February and March 1995. The authors state, "Notification of HIV–1 infection to infected persons or their family members is not routinely done in China. Neither these infected women nor their family members were informed of the infection because it was feared that they would commit suicide if they discovered they were infected with HIV–1." The authors recommended screening plasma products and donors, disclosing HIV status to infected individuals, and introducing surveillance of plasma donors. Other articles about HIV in plasma donors include: Ji Y et al., "An Antibody Positive Plasma Donor Detected at the Early Stage of HIV Infection in China," Transfusion Medicine 6,3:291–2, 1996; VR Nerurkar et al., "Complete Nef Gene Sequence of HIV Type 1 Subtype B" from Professional Plasma Donors in the People's Republic of China," AIDS Res Hum Retroviruses 14,5:461–4, 1998; and Zheng X et al. (China CDC), "The Epidemiological Study of HIV Infection Among Paid Blood Donors in One County of China," Zhonghua Liu Xing Bing Xue Za Zhi (China Journal of Epidemiology) 21,4:253–55, 2000.

[24] Dr. Yiming Shao, a virologist from the Chinese CDC, presented data at this conference.

[25] Before 2000, epidemiology was published in Chinese journals, e.g., Ye DQ, et al., "Serological epidemiology of blood donors in Hefei, Anhui Province," Chinese Journal of Public Health 17:367–8, 1998; and in 2001, in the West, e.g., Wu ZY, Rou KM, and R Detels, "Prevalence of HIV Infection Among Former Commercial Plasma Donors in Rural Eastern China," Health Policy and Planning 16,1:41–46, 2001

[26] Hua Shan, Wang J, Ren F, et al., "Blood Banking in China," The Lancet 360:1770–5, 2002.

[27] "AIDS Comprehensive Prevention and Treatment Demonstration Sites," China MOPH, 2003.

[28] For example, what was our response when Nelson Mandela failed to arrest the spread of HIV in South Africa, when under his watch, the prevalence of HIV in antenatal clinics rose from under 1 percent to near 30 percent?

fact, few governments, rich or poor, have successfully stemmed the spread of AIDS. In my view, the use of public health challenges as shorthand political critiques is a real danger as we move forward to combat a global threat. If China applied the same shorthand to characterize the U.S. healthcare system—a system that spends more than any other nation on medical care—and its capacity to respond to crises, what would we be reading? That African Americans are ten times as likely to die from HIV as whites, a statistic that reflects the disgraceful fact that disparities in morbidity and mortality between blacks and whites are actually greater now than in 1950? That the CDC responded rapidly to protect U.S. senators from anthrax, while failing to extend that same response to U.S. postal workers? In the rush to judgment on SARS we should also remember that the Chinese public health system has proven that it can respond to potential threats with speed and decisiveness: in December 1997, fearing an outbreak of a deadly strain of avian flu, the Chinese decided in 1 day to slaughter 1.2 million chickens from 160 farms and from more than 1,000 retailers and stalls.[29] How many other governments would have had the political will to take such action?

If response to SARS is compared to response to AIDS, we must examine all components of the response. We need to recognize that funding from the United States and other donors for biomedical and scientific collaborations is having an important impact on HIV prevention and treatment. Awarding a $15 million NIH Comprehensive International Program of Research on AIDS (CIPRA) grant to the China CDC in summer 2002 did not garner much media attention, but it provided funds for vaccine development, research on risk factors and behavioral interventions, and treatment trials that are all moving forward. Other U.S. and international organizations have contributed to research efforts, including the CDC, World Bank, DFID, UNAIDS, UNICEF, AUSAID, WHO, Ford Foundation, USAID, and the Gates Foundation. An additional consequence of these collaborations is increased attention to and training for researchers and communities on the ethics of humans subjects protections in clinical research.[30] Perhaps most important, clinical research also has the potential to focus attention on unmet treatment needs, as occurred after the first International AIDS meeting held in Africa, in 2000, when the magnitude of HIV among Africans became suddenly so salient that the world could no longer ignore the double standard of access to drugs only in developed countries. While many factors influenced China's decision to establish AIDS prevention and treatment services in the 100 highest prevalence counties, it was initiated after a major Sino-U.S. conference, in November 2002, on AIDS research and training in Beijing.

Statistics on disease and death rates are often used like Rorschach tests to measure the legitimacy of a government. Infectious diseases, including emerging pathogens like HIV and SARS, are particularly potent foci for such critiques, in part because they tend to fall hardest on the most vulnerable and least well served by society. In fact, as Paul Farmer, a Harvard physician and anthropologist who has written extensively about AIDS in Haiti, argues, "inequality itself constitutes our modern plague."[31] It is not clear how large the SARS epidemic in China will be or how long it will last. What is clear is that the outbreak has alerted China and the world to the relationship between infections and inequalities, and the peril to all of us if we ignore that relationship.

The spread of these emerging pathogens in China and elsewhere is a direct, if unintended, consequence of economic reform and integration of China into the global community. These are reforms that the United States has encouraged and in which the business and scientific communities have played key roles. Helping to enhance the strengths of China's public heath system instead of focusing on its failures will reinforce needed reforms that in some cases are already underway. We must credit China's current efforts to contain the epidemic in its hospitals, cities and borders, and openness to international collaboration and information sharing for what they are—contributions to the global efforts to control this deadly disease, and prevent an epidemic from becoming a pandemic.

---

[29] G Kolata, Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus that Caused It (NY: Simon and Schuster, 1999) p. 239. In fact, it was suspicion that SARS was actually avian flu that delayed response in some locations.

[30] Research ethics training programs have been carried out at the China CDC AIDS Center during 2002 and 2003, sponsored by NIH Fogarty International Center AIDS International Training in Research and Prevention Program, at both UCLA and UNC, and the NIH Office of AIDS Research.

[31] P Farmer, Infections and Inequalities: The Modern Plague. (Berkeley: UC Press, 1999).

PREPARED STATEMENT OF YANZHONG HUANG

MAY 12, 2003

IMPLICATIONS OF SARS EPIDEMIC FOR CHINA'S PUBLIC HEALTH INFRASTRUCTURE AND POLITICAL SYSTEM

THE RETURN OF THE GOD OF PLAGUES

Since November 2002, a form of atypical pneumonia called SARS (Severe Acute Respiratory Syndrome) has spread rapidly from China to Southeast Asia, Europe, and North America, prompting World Health Organization (WHO) to declare the ailment "a worldwide health threat." According to the organization, as of May 10, 2003, a cumulative total of 7,296 cases and 526 deaths have been reported from 33 countries or regions. The country that is particularly hit by the disease is China, where the outbreak of SARS has infected more than 4,800 people and killed at least 235 nationwide (excluding Hong Kong and Macao). The worst-hit city is China's capital Beijing, which has more than 2,200 cases—nearly half China's total—and 116 deaths. History is full of ironies: the epidemic caught China completely off guard 45 years after Mao Zedong bade "Farewell to the God of Plagues."

The SARS epidemic is not simply a public health problem. Indeed, it has caused the most severe social-political crisis to the Chinese leadership since the 1989 Tiananmen crackdown. Outbreak of the disease is fueling fears among some economists that China's economy might be headed for a serious downturn. It already seems likely to wipe out economic growth in the second quarter and possibly reduce the growth rate for the entire year to about 6 percent, well below the level the government says it required to absorb millions of new workers who need jobs. The disease has also spawned anxiety, panic and rumour-mongering, which has already triggered a series of protests and riots in China.[1] Meanwhile, the crisis has underscored the tensions and conflicts among the top leadership, and undermined the government's efforts to create a milder new image in the international arena. As Premier Wen Jiabao pointed out in a recent cabinet meeting on the epidemic, at stake were "the health and security of the people, overall State of reform, development, and stability, and China's national interest and international image." How to manage the crisis has become the litmus test of the political will and ability of the fourth generation of Chinese leadership.

Given the political aspect of the crisis, this testimony will consider not only problems in China's public health infrastructure but also dynamics of its political system. It proceeds in three sections. The first section focuses on the making of the crisis, and discusses how problems in the health and political systems allowed SARS to transform from a sporadic nuisance to an epidemic that now affects hundreds of millions of people across the country. The next section considers the government crusade against SARS, and examines how the State capacity in controlling the disease is complicated and compromised by the health infrastructure and political system. The last section concludes with some policy recommendations for the Commission to consider.

THE MAKING OF A CRISIS (NOVEMBER 2002–APRIL 2003)

Information blackout in Guangdong

With hindsight, China's health system seemed to respond relatively well to the emergence of the illness. The earliest case of SARS is thought to occur in Foshan, a city southwest of Guangzhou in Guangdong province, in mid-November 2002. It was later also found in Heyuan and Zhongshan in Guangdong. This "strange disease" alerted Chinese health personnel as early as mid-December. On January 2, a team of health experts were sent to Heyuan and diagnosed the disease as an infection caused by certain virus.[2] A Chinese physician, who was in charge of treating a patient from Heyuan in a hospital of Guangzhou, quickly reported the disease to local anti-epidemic station.[3] We have reason to believe that the local anti-epidemic station alerted the provincial health bureau about the disease, and the bureau in turn reported to the provincial government and the Ministry of Health (MoH) shortly afterwards, since the first team of experts sent by the Ministry arrived at Guangzhou on January 20 and the new provincial government (who took over on

[1] Anthony Kuhn, "China's Fight Against SARS Spawns Backlash," Los Angeles Times, My 6, 2003.

[2] "Guangzhou is fighting an unknown virus," Southern Weekly, February 13, 2003.

[3] Renmin ribao, overseas edition, 22 April 2003.

January 20) ordered an investigation of the disease almost at the same time.[4] A combined team of health experts from the Ministry and the province was dispatched to Zhongshan and completed an investigation report on the unknown disease. On January 27, the report was sent to the provincial health bureau and, presumably, Ministry of Health in Beijing. The report was marked "top secret," which means that only top provincial health officials could open it.

Further government reaction to the emerging disease, however, was delayed by the problems of information flow within the Chinese hierarchy. For three days, there were no authorized provincial health officials available to open the document. After the document was finally read, the provincial bureau distributed a bulletin to hospitals across the province. Yet few health workers were alerted by the bulletin, because most were on vocation for the Chinese New Year.[5] Meanwhile, the public was kept uninformed about the disease. According to the 1996 Implementing Regulations on the State Secrets Law (1988), any such diseases should be classified as a state secret before they are "announced by the Ministry of Health or organs authorized by the Ministry." In other words, until such time the Ministry chose to make public about the disease, any physician or journalist who reported on the disease would risk being persecuted for leaking State secrets.[6]

In fact, until February 11, not only news blackout continued, but the government failed to take any further actions on the looming catastrophe. Evidence indicated that the provincial government in deciding whether to publicize the event considered more about local economic development than about people's life and health. The Law on Prevention and Treatment of Infectious Diseases enacted in September 1989 contains some major loopholes. First, provincial governments only after being authorized by MoH are obliged to publicize epidemics in a timely and accurate manner (Article 23). Second, atypical pneumonia was not listed in the law as an infectious disease under surveillance, thus local government officials legally were not accountable for the disease. The law allows addition of new items to the list, but it does not specify the procedures through which new diseases can be added. All this provided disincentives for the government to effectively respond to the crisis.

To be sure, the media blackout and the government's slow response are not only the sole factors leading to the crisis. Scientists until today are still not entirely clear about the pathogen, spread pattern and mortality rate of SARS.[7] Due to the lack of knowledge about the disease, the top-secret document submitted to the provincial health bureau did not even mention that the disease was highly contagious, neither did it call for rigorous preventive measures, which may explain why by the end of February, nearly half of Guangzhou's 900 cases were healthcare workers.[8] Indeed, even rich countries, like Canada, were having difficulty controlling SARS. In this sense, SARS is a natural disaster, not a man-made one.

Yet there is no doubt that government inaction resulted in the crisis. To begin with, the security designation of the document means that health authorities of the neighboring Hong Kong SAR was not informed about the disease and, consequently, denied the knowledge they needed to prepare for outbreaks.[9] Very soon, the illness developed into an epidemic in Hong Kong, which has proved to be a major transit route for the disease. Moreover, the failure to inform the public heightened anxieties, fear, and widespread speculation. On February 8, reports about a "deadly flu" began to be sent via short messages on mobile phones in Guangzhou. In the evening, words like bird flu and anthrax started to appear on some local Internet sites.[10] On February 10, a circular appeared in the local media acknowledged the presence of the disease and listed some preventive measures, including improving ventilation, using vinegar fumes to disinfect the air, and washing hands frequently. Responding to the advice, residents in Guangzhou and other cities cleared pharmacy shelves of antibiotics and flu medication. In some cities, even the vinegar was sold out. The panic spread quickly in Guangdong, and had it felt even in other provinces.

On February 11, Guangdong health officials finally broke the silence by holding press conferences about the disease. The provincial health officials reported a total

---

[4] http://www.people.com.cn/GB/shehui/47/20030211/921420.html.

[5] John Pomfret, "China's slow reaction to fast-moving illness," Washington Post, 3 April 2003, p. A18.

[6] Li Zhidong, et al, Zhonghua renmin gonghe guo baomifa quanshu (Encyclopedia on the PRC State Secrets Law) (Changchun: Jilin renmin chubanshe, 1999), pp. 372–374. I thank Professor Richard Baum for bringing this to my attention.

[7] On February 18, the Chinese CDC identified chlamydia bacteria as the cause of the disease. At the end of the month, WHO experts believed the disease was an outbreak of bird flue. They did not identify it as a new infectious disease until early March.

[8] Pomfret, "China's slow reaction to fast-moving illness."

[9] Ibid.

[10] South China Morning Post, February 11, 2003.

of 305 atypical pneumonia cases in the province. The officials also admitted that there were no effective drugs to treat the disease, and the outbreak was only tentatively contained.[11] From then on until February 24, the disease was allowed to report extensively. Yet in the meantime, the government played down the risk of the illness. Guangzhou city government on February 11 went as far as to announce the illness was "comprehensively" under effective control.[12] As a result, while the panic was temporally allayed, the public also lost vigilance about the disease. During the run-up to the National People's Congress, the government halted most reporting. The news blackout would remain until April 2.

Beyond Guangdong: Ministry of Health and Beijing

Under the Law on Prevention and Treatment of Infectious Diseases, MoH is obliged to accurately report and publicize epidemics in time. The Ministry learned about SARS in January and informed WHO and provincial health bureaus about the outbreak in Guangdong around February 7. Yet no further action was taken. It is safe to assume that Zhang Wenkang, the health minister, brought the disease to the attention of Wang Zhongyu (Secretary General of the State Council) and Li Lanqing (the vice premier in charge of public health and education). We do not know what happened during this period of time; it is very likely that the leaders were so preoccupied preparing for the National People's Congress in March that no explicit directive was issued from the top until April 2.

As a result of the inaction from the central government and the continuous information blackout, the epidemic in Guangdong quickly spread to other parts of China. Since March 1, the epidemic has raged in Beijing. Yet for fear of disturbance during the NPC meeting, city authorities kept information about its scope not only from the public but also from the Party Center. MoH was reportedly aware of what was happening in the capital. The fragmentation of bureaucratic power, however, delayed any concerted efforts to address the problem. As one senior health official admitted, before anything could be done, the ministry had to negotiate with other ministries and government departments.[13] On the one hand, Beijing municipal government apparently believed that it could handle the situation well by itself and thus refused involvement of MoH. On the other hand, the Ministry did not have control of all health institutions. Of Beijing's 175 hospitals, 16 are under the control of the army, which maintains a relatively independent health system. Having admitted a large number of SARS patients, military hospitals in Beijing until mid-April refused to hand in SARS statistics to the Ministry. According to Dr. Jiang Yanyong, medical staff in Beijing's military hospitals were briefed about the dangers of SARS in early March, but told not to publicize what they had learned lest it interfere with the NPC meeting.[14] This might in part explain why on April 3, the health minister announced that Beijing had seen only 12 cases of SARS, despite the fact that in the city's No. 309 PLA hospital alone there were 60 SARS patients. The bureaucratic fragmentation also created communication problems between China and World Health Organization. WHO experts were invited by the Ministry to China but were not allowed to have access to Guangdong until April 2, 8 days after their arrival. They were not allowed to inspect military hospitals in Beijing until April 9. By that time, the disease had already engulfed China and spread to the world.

What is to blame?

The crisis revealed two major problems inherent in China's political system: coverup and inaction. Existing political institutions have not only obstructed the information flow within the system but also distorted the information itself, making misinformation endemic in China's bureaucracy. Because government officials in China are all politically appointed rather than elected by the general populace at each level of administration, they are held accountable only to their superiors, not the general public. This upward accountability generates perverse incentives for government officials in policy process. For fear that any mishap reported in their jurisdiction may be used as an excuse to pass them over for promotion, government officials at all levels tend to distort the information they pass up to their political masters in order to place themselves in a good light. While this is not something unique to China, the problem is alleviated in democracies through "decentralized oversight," which enables citizen interest groups to check up on administrative actions. Since China still refuses to enfranchise the general public in overseeing the activities of government

[11] Southern Weekly, February 13, 2003.
[12] http://www.people.com.cn/GB/shehui/47/20030211/921422.html.
[13] John Pomfret, "China's Crisis Has a Political Edge," Washington Post, April 27, 2003.
[14] Susan Jakes, "Beijing's SARS Attack," Time, April 8, 2003.

agencies, the upper-level governments are easier to be fooled by their subordinates. This exacerbates the information asymmetry problems inherent in a hierarchical structure and weakens effective governance of the central state.

Nevertheless, a functionalist argument can be made to explain the rampant underreporting and misreporting in China's officialdom. In view of the dying communist ideology and the official resistance to democracy, the legitimacy of the current regime in China is rooted in its constant ability to promote social-economic progress. As a result of this performance-based legitimacy, "government officials routinely inflate data that reflect well on the regime's performance, such as growth rates, while under reporting or suppressing bad news such as crime rates, social unrest and plagues."[15] In this sense, manipulation of data serves to shore up the regime's legitimacy.

In explaining the government's slow response to tackling the original outbreak, we should keep in mind that the health system is embedded in an authoritarian power structure in which policies are expected to come from the political leadership. In the absence of a robust civil society, China's policymaking does not feature a salient "bottom-up" process to move a "systemic" agenda in the public to a "formal" or governmental agenda as found in many liberal democracies. To be sure, the process is not entirely exclusionary, for the party's "mass line" would require leading cadres at various levels to obtain information from the people and integrate it with government policy during the policy formation stage. Yet this upward flow of information is turned on or off like a faucet by the State from above, not by the strivings of people from below.[16] Under this top-down political structure, each level takes its cue from the one above. If the leadership is not dynamic, no action comes from the party-state apparatus. The same structure also encourages lower-level governments to shift their policy overload to the upper levels in order to avoid taking responsibilities. As a result, a large number of agenda items are competing for the upper level government's attention. The bias toward economic development in the reform era nevertheless marginalized the public health issues in the top leaders' agenda. As a matter of fact, prior to the SARS outbreak, public health had become the least of the concerns of Chinese leaders. Compared to an economic issue a public health problem often needs an attention-focusing event (e.g., a large-scale outbreak of a contagious disease) to be finally recognized, defined, and formally addressed. Not surprisingly, SARS did not raise the eyebrows of top decisionmakers until it had already developed into a nationwide epidemic.

Another problem that bogged down government response is bureaucratic fragmentation. Because Chinese decisionmaking emphasizes consensus, the bureaucratic proliferation and elaboration in the post-Mao era requires more time and effort for coordination. With the involvement of multiple actors in multiple sectors, the policy outcome is generally the result of the conflicts and coordination of multiple subgoals. Since units (and officials) of the same bureaucratic rank cannot issue binding orders to each other, it is relatively easy for one actor to frustrate the adoption or successful implementation of important policies. This fragmentation of authority is also worsened by the relationship between functional bureaucratic agency (tiao) and the territorial governments (kuai). In public health domain, territorial governments like Beijing and Guangdong maintain primary leadership over the provincial health bureau, with the former determining the size, personnel, and funding of the latter. This constitutes a major problem for the Ministry of Health, which is bureaucratically weak, not to mention that its minister is just an ordinary member of CCP Central Committee and not represented in the powerful Politburo. A major policy initiative from the Ministry of Health, even issued in the form of a central document, is mainly a guidance document (zhidao xin wenjian) that has less binding power than one that is issued by territorial governments. Whether they will be honored hinges on the "acquiescence" (liangjie) of the territorial governments. This helps explain the continuous lack of effective response in Beijing city authorities until April 17 (when the anti-SARS joint team was established).

CHINA'S CRUSADE AGAINST SARS (APRIL 2003–PRESENT)

Reverse course

Thanks to strong international pressure, the government finally woke up and began to tackle the crisis seriously. On April 2, the State Council held its first meeting to discuss the SARS problem. Within 1 month, the State Council held three

[15] Minxin Pei, "A Country that does not take care of its people," Financial Times, April 7, 2003.

[16] Jean Oi, State and Peasant in Contemporary China (Berkeley: University of California Press, 1989), p. 228.

meetings on SARS. An order from the MoH in mid-April formally listed SARS as a disease to be monitored under the Law of Prevention and Treatment of Infectious Diseases and made it clear that every provincial unit should report the number of SARS on a given day by 12 noon on the following date. The party and government leaders around the country is now held accountable for the overall SARS situation in their jurisdictions. On April 17, an urgent meeting held by the Standing Committee of the Politburo explicitly warned against the covering up of SARS cases and demanded the accurate, timely and honest reporting of the disease. Meanwhile, the government also showed a new level of candor. Premier Wen Jiabao on April 13 said that although progress had been made, "the overall situation remains grave."[17] On April 20 the government inaugurated a nationwide campaign to begin truthful reporting about SARS.

The government also took steps to remove incompetent officials in fighting against SARS. Health minister Zhang Wenkang and Beijing mayor Meng Xuenong were discharged on April 20 to take responsibilities for their mismanagement of the crisis. While they were not the first ministerial level officials since 1949 who were sacked mid-crisis on a policy matter, the case did mark the first sign of political innovation from China's new leadership. According to an article in Economist, unfolding of the event (minister presides over policy bungle; bungle is exposed, to public outcry; minister resigns to take the rap) "almost looks like the way that politics works in a democratic, accountable country."[18] The State Council also sent out inspection teams to the provinces to scour government records for unreported cases and fire officials for lax prevention efforts. It was reported that since April, 120 government officials have lost their jobs.

The crisis also speeded up the process of institutionalizing China's emergency response system so that it can handle public health contingencies and improve interdepartmental coordination. On April 2, the government established a leading small group led by the health minister and an inter-ministerial roundtable led by a vice secretary general to address SARS prevention and treatment . This was replaced on April 23 by a task force known as the SARS Control and Prevention Headquarters of the State Council, to coordinate national efforts to combat the disease. Vice Premier Wu Yi was appointed as command-in-chief of the task force. On May 12, China issued Regulations on Public Health Emergencies (PHEs). According to the regulations, the State Council shall set up an emergency headquarters to deal with any PHEs, which refer to serious epidemics, widespread unidentified diseases, mass food and industrial poisoning, and other serious public health threats.[19]

Meanwhile, the government increased its funding for public health. On April 23, a national fund of two billion yuan was created for SARS prevention and control. The fund will be used to finance the treatment of farmers and poor urban residents infected with SARS and to upgrade county-level hospitals and purchase SARS-related medical facilities in central and western China. The central government also committed 3.5 billion yuan for the completion of a three-tier (provincial, city, and county) disease control and prevention network by the end of this year. This includes 600 million for the initial phase of constructing China's Center for Disease Control and Prevention (CDC).[20] The government has also offered free treatment for poor SARS patients.

The government also showed more interest in international cooperation in fighting against SARS. In addition to its cooperation with WHO, China showed flexibility in cooperating with neighboring countries in combating SARS. At the special summit called by ASEAN and China in late April, Chinese premier Wen Jiabao pledged 10 million yuan to launch a special SARS fund and joined the regionwide confidence-building moves to take coordinated action against the disease.

Problems and Concerns

These measures are worth applauding, but are they going to work? The battle against the disease can be compromised by China's inadequate public health system. One of the major problems here is the lack of state funding. Already, the portion of total health spending financed by the government has fallen from 34 percent in 1978 to less than 20 percent now.[21] Cash-strapped local governments whose health-care system is under financed would be extremely hard pressed in the process of SARS prevention and treatment. It is reported that some hospitals have refused to

[17] Business Week, April 28, 2003.
[18] "China's Chernobyl," Economist, April 26, 2003, p. 9.
[19] Xinhua News, http://news.xinhuanet.com/newscenter/2003–05/12/content—866362.htm.
[20] Renmin ribao (People's daily), overseas edition, May 9, 2003.
[21] Yanzhong Huang, Mortal Peril: Public Health in China and Its Security Implications. CBACI Health and Security Series, Special Report 6, May 2003.

accept patients who have affordability problems.[22] The offer of free treatment for poor SARS patients is little consolation to the large numbers with no health insurance, particularly the unemployed and the millions of ill-paid migrant workers, who are too poor to consider hospital treatment which getting sick. According to a 1998 national survey, about 25.6 percent of the rural patients cited "economic difficulties" as the main reason that they did not seek outpatient care.[23]

The lack of facilities and qualified medical staff to deal with the SARS outbreak also compromises government efforts to contain the disease. Among the 66,000 healthcare workers in Beijing, less than 3000, or 4.3 percent of them are familiar with respiratory diseases.[24] Similarly, hospitals in Guangdong are reported to face shortage in hospital beds and ambulances in treating SARS. This problem is actually worsened by the absence of referral system and the increasing competition between health institutions, which often leads to little coordination but large degrees of overlap. As SARS cases increases, some hospitals are facing the tough choice of losing money or not admitting further SARS patients. In Beijing, the government had to ask for help from the military.

Tremendous inequalities in health resource distribution posed another challenge to the Chinese leadership. To the extent that health infrastructure are strained in Beijing, the situation would be much worse in China's hinterland or rural areas. Compared with Beijing, Shanhai, and Jiangsu and Zhejiang provinces, which receives a full quarter of health-care spending, the seven provinces and autonomous regions in the far west only get 5 percent.[25] The rural-urban gap in health resource distribution is equally glaring. Representing only 20 percent of China's population, urban residents claim more than 50 percent of the country's hospital beds and health professionals. So far, a large-scale epidemic has not yet appeared in the countryside. The percentage of peasants who are infected, however, is high in Hebei, Inner Mongolia, and Shanxi, which points to the relatively high possibility of spread to the rural areas.[26]

Some other concerns also complicate the war on SARS. In terms of the mode of policy implementation, the Chinese system is in full mobilization mode now. All major cities are on 24-hour alert, apparently in response to emergency directions from the central leadership. So far, all indications point to decisive action for quarantine. By May 7, 18,000 people had been quarantined in Beijing. Meanwhile, the Maoist "Patriotic Hygiene Campaign" has been revitalized. In Guangdong, 80 million people were mobilized to clean houses and streets and remove hygienically dead corners.[27] By placing great political pressure on local cadres in policy implementation, mobilization is a convenient bureaucratic tool for overriding fiscal constraints and bureaucratic inertia whilst promoting grassroots cadres to behave in ways that reflect the priorities of their superiors. Direct involvement of the local political leadership increases program resources, helps ensure they are used for program purposes, and mobilizes resources from other systems, including free manpower transferred to program tasks. Yet in doing so a bias against routine administration was built into the implementation structure. In fact, the increasing pressure from higher authorities, as indicated by the system that holds government heads personally responsible for SARS spread under their jurisdiction, makes strong measures more appealing to local officials, who find it safer to be overzealous than to be seen as "soft." There are indications that local governments overkill in dealing with SARS. In some cities, those who were quarantined lost their jobs. Until recently, Shanghai was quarantining people from some regions hard hit by SARS (such as Beijing) for 10 days even if they had no symptoms.[28] While many people are cooperating with the government measures, there is clear evidence suggesting that some people were quarantined against their will.[29]

The heavy reliance on quarantine raises a question that should be of interest to the committee: will anti-SARS measures worsen human rights situations in China? This question of course is not unique to China: even countries like the U.S. are debating whether it is necessary to apply dictatorial approach to confront health risks more effectively. The Model Emergency Health Powers pushed by the Bush administration would permit state Governors in a health crisis to impose quarantines, limit people's movements and ration medicine, and seize anything from dead bodies to

---

[22] Washington Post, April 14, 2003.
[23] Ministry of Health, National Health Service Research. Beijing, 1999.
[24] Renmin ribao, overseas edition, May 1, 2003.
[25] BusinessWeek, April 28, 2003.
[26] Xinhua News, May 10, 2003.
[27] Renmin ribao, April 9, 2003.
[28] Pomfret, "China Feels Side Effects from SARS," Washington Post, May 2, 2003.
[29] Beijing Youth Daily, May 2, 2003; http://www.people.com.cn/GB/shehui/45/20030510/988713.html.

private hospitals.[30] While China's Law on Prevention and Treatment of Infectious Disease does not explicate that quarantines apply to SARS epidemic, Articles 24 and 25 authorize local governments to take emergency measures that may compromise personal freedom. The problem is that unlike democracies, China in applying these measures excludes the input of civil associations. Without engaged civil society groups to act as a source of discipline and information for government agencies, the sate capability is often used not in the society's interest. Official reports suggested that innocent people were dubbed rumor spreaders and arrested simply because they relayed some SARS-related information to their friends or colleagues.[31] According to the Ministry of Public Security, since April public security departments have investigated 107 cases in which people used Internet and cell phones to spread SARS-related "rumors."[32] Some Chinese legal scholars have already expressed concerns that the government in order to block information about the epidemic may turn to more human rights violations.[33]

The lack of engagement of civil society in policy process could deplete social capital so important for government anti-SARS efforts. As the government is increasingly perceived to be incapable of adequately providing the required health and other social services, it has alienated members of society, producing a heightened sense of marginalization and deprivation among affected populations. These alienated and marginalized people have even less incentive than they would ordinarily have to contribute to government-sponsored programs. The problem can be mitigated if workers and peasants are allowed to form independent organizations to fight for their interests. Unfortunately, China's closed political system offers few institutional channels for the disadvantaged groups to express their private grievances. The government failure to publicize the outbreak in a timely and accurate manner and the ensuing quick policy switch caused further credibility problems for the government. Washington Post reported a SARS patient who fled quarantine in Beijing because he did not believe that the government would treat his disease free of charge. This lack of trust toward the government contributed to the spread of rumors even after the government adopted a more open stance on SARS crisis. In late April, thousands of residents of a rural town of Tianjin ransacked a building, believing it would be used to house ill patients with confirmed or suspected SARS, even though officials insisted that it would be used only as a medical observation facility to accommodate people who had close contacts with SARS patients and for travelers returning from SARS hot spots. Again, here the lack of active civilian participation exacerbated the trust problems. In initiating the project the government had done nothing to consult or inform the local people.[34] Opposition to official efforts to contain SARS was also found in a coastal Zhejiang province, where several thousand people took part in a violent protest against six people who were quarantined after returning from Beijing.[35]

Last but not least, policy difference and political conflicts within the top leadership can cause serious problems in polity implementation. The reliance on performance legitimacy put the government in a policy dilemma in coping with the crisis. If it fails to place the disease under control and allows it to run rampant, it could become the event that destroys the Party's assertions that it improves the lives of the people. But if the top priority is on health, economic issues will be moved down a notch, which may lead to more unemployment, more economic loss and more social and political instability. The disagreement over the relationship between the two was evidenced in the lack of consistence in official policy. On April 17, the CCP Politburo Standing Committee meeting focused on SARS. In a circular issued after the meeting, the Party Center made it clear that "despite the daunting task of reform and development, the top priority should be given to people's health and life security. We should correctly deal with the temporary loss in tourism and foreign trade caused by atypical pneumonia, have long-range perspective in thinking or planning, and do not concern too much about temporary loss."[36] Eleven days later, the Politburo meeting emphasized Jiang Zemin's "Three Represents" and, by calling for a balance between combating SARS and economic work, reaffirmed the central status of economic development.[37] This schizophrenic nature of central policy is going to cause at least two problems that will not help the State to boost its capacity in com-

---

[30] Nicholas D. Kristof, "Lock 'Em Up," New York Times, May 2, 2003.
[31] http://www.people.com.cn/GB/shehui/47/20030426/980282.html.
[32] http://www.people.com.cn/GB/shehui/44/20030508/987610.html. May 8, 2003.
[33] http://www.duoweinews.com Accessed on May 10, 2003.
[34] Erik Eckholm, "Thousands Riot in Rural Chinese Town over SARS," New York Times, April 28, 2003.
[35] "China's fight against SARS spawns backlash," Los Angeles Times, May 6, 2003.
[36] http://www.people.com.cn/GB/shizheng/3586/20030422/977907.html, April 22, 2003.
[37] Renmin ribao, April 29, 2003.

bating SARS. First, because the Party Center failed to signal its real current priorities loud and clear, local authorities may get confused and face a highly uncertain incentive structure of rewards and punishments. Given the central government's inability to perfectly differentiate between simple incompetence and willful disobedience, local policy enforcers may take advantage of the policy inconsistency to "shirk" or minimize their workload, making strict compliance highly unlikely. Second, the policy difference will aggravate China's faction-ridden politics, which in turn can reduce central leaders' policy autonomy so important for effectively fighting against SARS. A perceived crisis can precipitate State èlites to fully mobilize the potential for autonomous action. Yet power at the apex in China inheres in individual idiosyncrasies rather than institutions. This lack of institutionalization at the top level, coupled with the pretensions of a centralized bureaucracy, sets the stage for a very constrained from of politics, limiting what passed as national politics to relations among the top elite. A general rule in Chinese elite politics is that policy conflicts will be interwoven with factionalism. Former President Jiang's allies in the Politburo Standing Committee seemed to be quite slow to respond to the anti-SARS campaign embarked on by Hu Jintao and Wen Jiabao on April 20. Wu Bangguo, Jia Qinglin, and Li Changchun did not show up on the front stage of SARS campaign until April 24. The absence of esprit de corps among key èlites would certainly reduce state autonomy needed in handling the crisis. It is speculated that the fall of Meng Xuenong, a protègè of Hu, was to balance the removal of Zhang Wenkang, a Jiang follower. Given that a health minister, unlike a mayor of Beijing, is not a major power player, this seems to send a message that the former president is still very much in control. The making of big news Jiang's order on April 28 to mobilize military health personnel only suggests the lack of authority of Hu Jintao and Wen Jiabao over the military. Intraparty rivalry in handling the crisis reminded people political upheavals in 1989, when the leaders disagreed on how to handle the protests and Deng Xiaoping the paramount leader played the game between his top associates before finally siding with the conservatives by launching a military crackdown.

POLICY RECOMMENDATIONS

The above analysis clearly points to the need for the Chinese government to beef up its capacity in combating SARS. Given that a public health crisis reduces State capacity when ever-increasing capacity is needed to tackle the challenges, purely endogenous solutions to build capacity are unlikely to be successful, and capacity will have to be imported from exogenous sources such as massive foreign aid.[38] In this sense, building state capability also means building more effective partnerships and institutions internationally. As I summarized somewhere else, international actors can play an important role in creating a more responsible and responsive government in China.[39] First, aid from international organizations opens an alternative source of financing healthcare, increasing the government's financial capacity in the health sector. Second, international aid can strengthen the bureaucratic capacity through technical assistance, policy counseling, and personnel training. Third, while international organizations and foreign governments provide additional health resources in policy implementation, the government increasingly has to subject its agenda-setting regime to the donors' organizational goals, which can make the government more responsive to its people. The recent agenda shift to a large extent was caused by the strong international pressures exerted by the international media, international organizations, and foreign governments. There is indication that Internet is increasingly used by the new leadership to solicit policy feedback, collect public opinions and mobilize political support. Starting February 11, Western news media were aggressively reporting on SARS and on government cover-up of the number of cases in China. It is very likely that Hu Jintao and Wen Jiaobao, both Internet users, made use of international information in making decisions on SARS. In other words, external pressures can be very influential because Chinese governmental leaders are aware of the weakness of the existing system in effectively responding to the crisis, and have incentives to seek political resources exogenous to the system.

From the perspective of international actors, helping China fighting SARS is also helping themselves. Against the background of a global economy, diseases originating in China can be spread and transported globally through trade, travel, and

[38] Andrew T. Price-Smith, "Pretoria's Shadow: The HIV/AIDS Pandemic and National Security in South Africa," Special Report No. 4, CBACI Health and Security Series, September 2002, p. 27.

[39] Mortal Peril: Public Health in China and Its Security Implications.

population movements. Moreover, an unsustainable economy or State collapse spawned by poor health will deal a serious blow to the global economy. As foreign companies shift manufacturing to China, the country is becoming a workshop to the world. A world economy that is so dependent on China as an industrial lifeline can become increasingly vulnerable to a major supply disruption caused by SARS epidemic. Perhaps equally important, if the SARS epidemic in China runs out of control and triggers a global health crisis, it will result in some unwanted social and political changes in other countries including the United States. As every immigrant or visit from China or Asia is viewed as a Typhoid Mary, minorities and immigration could become a sensitive domestic political issue. The recent incident in New Jersey, in which artists with Chinese background were denied access to a middle school, suggests that when SARS becomes part of a national lexicon, fear, rumor, suspicion, and misinformation can jeopardize racial problems in this country.[40]

Given the international implications of China's public health, it is in the U.S. interest to expand cooperation with China in areas of information exchange, research, personnel training, and improvement of public health facilities. But it can do more. It can modify its human rights policy so that it accords higher and clearer priority to health status in China. Meanwhile, it could send a clearer signal to the Chinese leadership that the United States supports reform-minded leaders in the forefront of fighting SARS. To the extent that regime change is something the U.S. would like to see happening in China, it is not in the U.S. interest to see Hu Jingtao and Wen Jiaobao purged and replaced by a less open and less humane government, even though that government may still have strong interest in maintaining a healthy U.S.-China relationship. The United States simply should not miss this unique opportunity to help create a healthier China.

PREPARED STATEMENT OF BATES GILL

MAY 12, 2003

LESSONS, IMPLICATIONS, AND FUTURE STEPS

INTRODUCTION

Allow me to begin by expressing my appreciation to the Commission for this opportunity to appear before you today.

The repercussions for China of the SARS epidemic will resonate well beyond the tragic and growing loss of life.[1] On the brighter side, the progression of the epidemic from Guangdong to Beijing, into the Chinese countryside, and across the world demonstrates the mainland's increasing economic and social openness, mobility and interdependence within the country itself, within the East Asia region and across the planet, mobilizes concern for China's health-care system, and may spark greater openness and accountability within the Chinese leadership.

On the other hand, the outbreak of SARS also exposes a number of troubling developments and uncertainties in China: old-style misinformation, opaque communication, an ailing public health-care infrastructure, continued reticence in dealing with foreign partners, and a likely slowdown in economic growth in China and the region. All of these negative developments also raise serious questions about China's ability to cope with other infectious diseases such as hepatitis, tuberculosis, and HIV/AIDS.

To examine these issues, the following pages will analyze some of the early lessons and implications of the SARS epidemic, and recommend steps that can be taken to combat future health-care crisis in China more effectively.

LESSONS

Sclerotic and reactive process

To begin, by taking so long to reveal the real dimensions of the SARS problem, Chinese authorities underscored their reputation as secretive and out of step with international practice. News of falsified communications, deliberate misinformation, obstruction of U.N. assessment teams and reluctance to reveal the full extent of the

---

[40] "Fear, not SARS, rattles South Jersey School," New York Times, May 10, 2003.

[1] This testimony draws from recent articles published by the witness. See: Bates Gill, "China: Richer, But Not Healthier," Far Eastern Economic Review, May 1, 2003; Bates Gill, "China will pay dearly for the SARS debacle," International Herald Tribune, April 22, 2003; Bates Gill and Andrew Thompson, "Why China's health matters to the world," South China Morning Post, April 16, 2003.

epidemic to the World Health Organization all raise some troubling questions about real change in China.

Some argue that Beijing's current openness and responsiveness to SARS indicates a new and more positive direction for the leadership. This may be, though it remains relatively early to know with certainty whether this new direction will be limited to SARS-related responses, or can be broadened to encompass a new across-the-board approach by the Chinese leadership. For the time being, it appears the mainland's initial denial and slow response to the SARS outbreak characterizes a political environment where individual initiative is discouraged and social stability is protected above other interests, to the detriment of social safety.

Additionally, the initial slow reaction by medical authorities can be explained by outdated laws that prevent effective communication about emerging epidemics. The State Secrets Law prevents local authorities from discussing an emerging outbreak until the Ministry of Health in Beijing has announced the existence of an epidemic. In the case of SARS, the silence of the bureaucracy, coupled with an increasingly mobile population, virtually guaranteed that an infectious disease would quickly spread well beyond Guangdong to the rest of the world.

Paradoxically, despite the sclerotic and old-style official response to SARS, China's society has become more open than ever. Indeed, SARS spread as rapidly as it did precisely because of China's expansive interaction domestically and with its neighbors. But Beijing's old way of doing things now faces a serious challenge: to prevent infectious diseases from becoming major social, political and economic problems will demand greater openness, transparency and candor, both at home and with partners abroad.

Ailing health-care capacity

Even if old-style political and bureaucratic bottlenecks could be overcome, it is unlikely that the mainland's health-care system would have been able to prevent the spread of SARS. The rapid spread of other emerging infectious diseases throughout the mainland demonstrates the inability of the public health system to deal adequately with the complex nature of infectious diseases in a modern, globalized China. In urban areas, public health is adequate for those who can afford it or are still employed in the State sector, where insurance and company clinics can provide primary care. However, in rural areas, where the majority of the population resides, social services are inadequate to non-existent. The ability to diagnose and treat emerging diseases competently does not exist throughout most of China.

Blood-borne and sexually transmitted infections have posed a particular challenge to health authorities in China. For example, HIV/AIDS infects over one million Chinese, while similarly transmitted diseases including hepatitis B and C infect over a hundred million more. The capacity of China's health-care system is so stretched that hepatitis B, a disease for which there is a vaccine, still affects an estimated 170 million Chinese, accounting for two-thirds of the world's cases. The inability to prevent the spread of infectious diseases within China will have serious long-term economic impacts globally.

Reluctance to work with foreign partners

From the onset of SARS, Beijing and the provinces seem reluctant to fully accept assistance from the international community to deal with their burgeoning public health quandary. Only after a 2-week wait were inspectors from the World Health Organization permitted to travel to the SARS outbreak's epicenter in Guangdong. This same reticence characterizes China's earlier response to its HIV/AIDS crisis; political leaders in Beijing and particularly throughout local jurisdictions remain overly cautious in their willingness to accept international intervention and assistance.

IMPLICATIONS

Future epidemics

The official Chinese response to SARS did not bode well for how the government might respond to other new, perhaps even more serious infectious disease threats. Beijing's initial reaction to SARS parallels its response to HIV/AIDS: denial, followed by reluctant acknowledgment and hesitant mobilization of resources to combat the epidemic. At present, in spite of some recent positive steps by Beijing, the political and socioeconomic conditions are ripe in for the further spread of infectious disease, including atypical pneumonia, hepatitis and HIV/AIDS.

True, Chinese leaders recently have taken greater interest in dealing with SARS. But admitting to problems is only half the battle. There is still a long way to go, not just in dealing with SARS, but with other health-care-related challenges. Probably the biggest issues to tackle have to do with improved monitoring and communica-

tion to accurately gauge the nature and extent of disease outbreaks, and developing a more effective health-care infrastructure to meet these emergent challenges. Local health-care capacity varies wildly across the country as central government spending in this sector flattens and localities are expected to pick up the difference. As a result, the expertise and capacity to diagnose, prevent and treat the spread of disease—especially new viruses—is limited to nonexistent throughout much of China.

Economic downturn

The ability of China to devote greater resources to its health-care system will be constrained in the near term by SARS' near-term economic impact, though the true effect over the next year or more is still hard to measure. Rough estimates made by international economists indicate that China's GDP growth for 2003 could be reduced by anywhere from 0.5 to 2 percent. Beijing is unlikely to issue figures on the economic impact of SARS. But the decline in tourism, airline travel, trade and international confidence will certainly be felt in China, particularly in hard-hit Guangdong Province, one of China's main engines of direct foreign investment and export-led growth. The government is trying to counter the effects of the downturn with massive increases in funding for SARS prevention and control. Billions of RMB have been allocated for projects throughout the country, ranging from construction of infrastructure, to purchasing of supplies, to expanded research and development of tests and medicines to combat SARS.

On the other hand, the short-term damage from SARS to the economy is perhaps minimal compared to the shaken confidence of foreign investors in the Chinese government's ability to effectively manage the health of the Chinese population—at a minimum, the Chinese government's reaction to the SARS outbreak has reminded foreign investors and the world at large of the uncertainties and contradictions in dealing with China.

Partly because it did not take steps promptly to address the public health crisis, the Chinese government will also have to cope with a downturn in the economic health of greater China—consisting of the mainland, Hong Kong and Taiwan—as well as the wider East Asian region. Singapore, Hong Kong, and Taiwan have already trimmed official forecasts for economic growth as a result of the SARS outbreak. In one early analysis, Morgan Stanley lowered its estimate of East Asian economic growth, excluding Japan, from 5.1 percent to 4.5 percent for 2003.

LOOKING AHEAD

China's approach to SARS exposes troubling weaknesses that are reflected in Beijing's overall reaction to deadly disease outbreaks. These are: opaque communication channels—and even deliberate disinformation—from provincial to central authorities; denial and inaction short of international outcry and senior-leadership intervention; weakening public health-care capacity to monitor, diagnose, prevent and treat emergent disease outbreaks; and early and persistent reticence to collaborate effectively with foreign partners. Chinese authorities, working with the United States and others, must try to change this pattern.

A first priority must be to implement more transparent, accurate and coordinated public health-care management and communication. As a start, the country should invest even more heavily in its epidemiological and surveillance capacity to accurately detect, monitor and quickly report on disease outbreaks and their progress. Beijing should impose improved cooperation both between the central and local authorities and across the bureaucracy in a more effective interagency mechanism.

More transparent and enforced regulatory structures will also guide public health and other officials to react in a more professional and socially conscious way. Health-care related quasi- and non-governmental organizations could be more effectively utilized to monitor and improve methods for the prevention, treatment and care of disease. But for these kinds of steps to succeed, China's new leadership must commit to raising the political priority of public health on their agenda of socio-economic challenges.

Second, resources for public health will need to be expanded considerably, both as a part of central and provincial government expenditures. At a basic level, more well-trained professionals will be needed to properly diagnose, treat and care for persons afflicted with emergent epidemics in China. Even more could be gained by promoting greater awareness and preventive messaging, not to alarm people, but to help them take the necessary precautions to protect against infectious diseases prevalent in China. Again, grass-roots and community-based organizations can be effective partners in this effort, if well-coordinated and given adequate leeway and resources.

Finally, China and the international public health community have a shared interest in scaling up cooperation and assistance programs. There are numerous

international health related assistance programs in China, but most operate at a relatively modest scale. Expanding successful programs will require significant new funding. Major donor nations should also consider re-channeling development aid to focus more on public health programs. In the end, however, China—as one of the world's largest economies and an aspiring great power—will need to show a greater commitment to working with international partners and to taking its public health challenges more seriously.

Minister Wu Yi in her new role as the Minister of Health has already taken steps to endorse increased cooperation with the United States on many of these fronts. Speaking on the telephone last week, Vice Premier Wu and Secretary of Health and Human Services (HHS) Tommy Thompson agreed to proceed with planning for expanded collaborative efforts in epidemiological training and the development of greater laboratory capacity in China. These new efforts will increase the number of HHS personnel working in China beyond the two CDC employees currently stationed in Beijing. This expanded collaboration, while certainly spurred by the current SARS epidemic, will be very important in helping China combat other infectious diseases, especially newly emerging infectious diseases such as tuberculosis, HIV/AIDS and other STDs.

SUBMISSIONS FOR THE RECORD

[From the South China Morning Post, April 16, 2003]

WHY CHINA'S HEALTH MATTERS TO THE WORLD

(By Bates Gill and Andrew Thompson)

The unstoppable march of severe acute respiratory syndrome (SARS) from Guangdong to Hong Kong and beyond demonstrates the mainland's increasing economic and social interdependence with the region and the entire planet. Since the mainland has globalised and become East Asia's engine of growth, maintaining the health of its economy and society is in the world's best interests and will present a significant challenge to China's partners in the region and around the world.

The notion of the mainland as a closed society needs to be seriously reconsidered. Domestically, more Chinese enjoy freedom of movement then ever before. Internationally, millions of travellers from all over the world visit the mainland while millions of Chinese travel abroad in increasing numbers every year. As the most important transit point for commerce throughout East Asia, Hong Kong has reaped great benefits from its strategic position. Now Hong Kong, and to a lesser degree the rest of East Asia and the world in general, are paying a price for the mainland's underdeveloped and opaque public health system.

The mainland's formerly admirable public health system has not fared well in the years of gaige kaifang (reform and opening up), with government spending unable to keep pace with a changing society and integration with the rest of the world. The public health system has proven itself ill-prepared to cope with rapidly emerging diseases such as SARS, hepatitis and HIV/AIDS.

The mainland's initial denial and slow response to the SARS outbreak characterises a political environment where individual initiative is discouraged and social stability is protected above other interests. Additionally, the initial slow reaction by medical authorities can be explained by outdated laws that prevent effective communication about emerging epidemics. The State Secrets Law prevents local authorities from discussing an emerging outbreak until the Ministry of Health in Beijing has announced the existence of an epidemic. In the case of SARS, the silence of the bureaucracy, coupled with an increasingly mobile population, virtually guaranteed that an infectious disease would quickly spread well beyond Guangdong to the rest of the world.

Even if the bureaucratic delay did not occur, it is unlikely that the mainland's health-care system would have been able to prevent the spread of SARS. The rapid spread of other emerging infectious diseases throughout the mainland demonstrates the inability of the public health system to deal adequately with the complex nature of infectious diseases in a modern, globalised China. In urban areas, public health is adequate for those who can afford it or are still employed in the State sector, where insurance and company clinics can provide primary care. However, in rural areas, where the majority of the population resides, social services are inadequate to non-existent. The ability to diagnose and treat emerging diseases competently does not exist throughout most of China.

While SARS has had an immense, immediate economic impact on the economy of the region, there will be a much greater impact in the long term, as other infectious diseases emerge and spread. Blood-borne and sexually transmitted infections have posed a particular challenge to health authorities in China.

HIV/AIDS infects over one million Chinese, while similarly transmitted diseases including hepatitis B and C infect over a hundred million more. The capacity of China's health-care system is so stretched that hepatitis B, a disease for which there is a vaccine, still affects an estimated 170 million Chinese, accounting for two-thirds of the world's cases. The inability to prevent the spread of infectious diseases within China will have serious long-term economic impacts globally.

The mainland will have to bolster its medical capacity if it is to maintain steep economic growth rates and continue to play the role of "factory to the world." The central government must create a more effective, transparent and capable public health management system that is able to communicate quickly both nationally and internationally. Vice-Premier Wu Yi toured the Chinese Centres for Disease Control and Prevention this month and insisted they establish an emergency response mechanism that includes an early warning and reporting function. The outcry over SARS might motivate the central government to improve the country's health system, but that remains to be seen.

As the SARS outbreak demonstrates, the mainland's health matters to the world. Global co-operation to quickly identify, treat and prevent the spread of new, emerging diseases will help the mainland and the world maintain its economic and medical health.

* Bates Gill holds the Freeman Chair in China Studies and Andrew Thompson is a research associate, at the Centre for Strategic and International Studies in Washington.

[From the International Herald Tribune, April 22, 2003]

CHINA WILL PAY DEARLY FOR THE SARS DEBACLE

CONTAGIOUS CONFUSION

(By Bates Gill)

WASHINGTON: The repercussions for China of the outbreak of severe acute respiratory syndrome will resonate well beyond the tragic—and growing—loss of life. Beijing's evasive and tardy response to the challenge of the SARS virus reflects very poorly on China's international standing, undermines its economic prospects and bodes ill for combating other infectious diseases.

The government's embarrassment was evident Sunday when it admitted that cases of SARS were many times higher than previously reported. At the same time, China's health minister and the mayor of Beijing were sacked. This was not the hoped-for auspicious beginning for the newly installed fourth generation of Chinese leadership and its widely touted goal of "building a well-off society."

By taking so long to reveal the real dimensions of the SARS problem, Communist Party authorities underscored their reputation as secretive and out of step with international practice. They have reminded foreign investors and the world at large of the uncertainties and contradictions in dealing with China.

News of falsified communications, deliberate misinformation, obstruction of U.N. assessment teams and reluctance to reveal the full extent of the epidemic to the World Health Organization must give pause to even the headiest optimist about real change in China. Beijing's aspirations to regional leadership have been stalled and will take time to put back on track.

The official Chinese response to SARS does not bode well for how the government might respond to other new, perhaps even more serious infectious disease threats. Beijing's reaction to SARS parallels its response to AIDS: denial, followed by reluctant acknowledgment and hesitant mobilization of resources to combat the epidemic.

And the steady spread of SARS, AIDS and other infectious diseases shows that even when authorities openly recognize a public health problem, they lack the infrastructure to fight back effectively.

Paradoxically, despite the sclerotic and old-style official response to SARS, China's society has become open. SARS spread as rapidly as it did precisely because of China's expansive interaction domestically and with its neighbors. The international community supports this trend and wants to see China succeed in its social, political and economic transformation and its integration into the global mainstream.

Official Chinese tactics of suppression and concealment seem to work well in preventing what Beijing calls the "poisonous weeds" and "spiritual pollution" of serious political and social reform. But Beijing's way of doing things now faces a serious challenge: to prevent infectious diseases from becoming major social, political and economic problems will demand greater openness, transparency and candor, both at home and with partners abroad.

The political system in China appears to be becoming more responsive. Yet the SARS debacle reveals a dangerous fragility beneath the surface of the country's rapidly transforming society. Partly because it did not take steps promptly to address the public health crisis, the Chinese government will have to cope with a downturn in the economic health of greater China—consisting of the mainland, Hong Kong and Taiwan—as well as the wider East Asian region.

Singapore and Hong Kong have already trimmed official forecasts for economic growth as a result of the SARS outbreak, and private researchers see a similar SARS-related downturn in Taiwan. Beijing is unlikely to issue figures on the economic impact of SARS. But the decline in tourism, airline travel, trade and international confidence—in addition to the poor prospects of key economic partners in the region—will certainly be felt in China, particularly in hard-hit Guangdong Province, one of China's main engines of direct foreign investment and export-led growth.

Moreover, in an already skittish international economy teetering on the edge of recession, loss of confidence in greater China, the one area where there was some optimism, will have adverse implications for the global growth. Morgan Stanley, for example, has lowered its estimate of East Asian economic growth, excluding Japan, from 5.1 percent to 4.5 percent for 2003. And the SARS contagion may get worse before it gets better.

* The writer holds the Freeman Chair in China Studies at the Center for Strategic and International Studies.

[From the Far Eastern Economic Review, May 1, 2003]

CHINA: RICHER, BUT NOT HEALTHIER

(By Bates Gill)

The news about Severe Acute Respiratory Syndrome (SARS) out of China seems to get worse with each passing week. For, in spite of some recent positive steps by Beijing, the political and socioeconomic conditions are ripe in China for the further spread of infectious disease, including atypical pneumonia, hepatitis and HIV/AIDS.

True, Chinese leaders recently have taken greater interest in dealing with SARS. But admitting to problems is only half the battle. There is still a long way to go, not just in dealing with SARS, but with other health-care-related challenges. To begin, even if political and bureaucratic impediments can be overcome, the Chinese health-care system is incapable of adequately addressing the complexities of emergent epidemiological and prevention challenges. Local health-care capacity varies wildly across the country as central government spending in this sector flattens and localities are expected to pick up the difference. As a result, the expertise and capacity to diagnose, prevent and treat the spread of disease—especially new viruses—is limited to nonexistent throughout much of China.

In addition, Beijing and the provinces seem reluctant to fully accept assistance from the international community to deal with their burgeoning public-health quandary. Only after a 2-week wait were inspectors from the World Health Organization permitted to travel to the SARS outbreak's epicentre in Guangdong. This same reticence characterizes China's earlier response to its HIV/AIDS crisis; political leaders in Beijing and throughout local jurisdictions remain overly cautious in their willingness to accept international intervention and assistance.

China's approach to SARS exposes troubling weaknesses that are reflected in Beijing's overall reaction to deadly disease outbreaks. These are: opaque communication channels—and even deliberate disinformation—from provincial to central authorities; denial and inaction short of international outcry and senior-leadership intervention; weakening public-health-care capacity to monitor, diagnose, prevent and treat emergent disease outbreaks; and early and persistent reticence to collaborate effectively with foreign partners. This must change.

A first priority must be to implement more transparent, accurate and coordinated public-health-care management and communication. As a start, the country should invest even more heavily in its epidemiological and surveillance capacity to accurately detect, monitor and quickly report on disease outbreaks and their progress. Beijing will also need to oversee improved cooperation both between the central and local authorities and across the bureaucracy in a more effective interagency mechanism. But for these kinds of steps to succeed, China's new leadership must commit to raising the political priority of public health on their agenda of socioeconomic challenges.

Second, resources for public health will need to be expanded considerably, both as a part of central and provincial government expenditures. At a basic level, more well-trained professionals will be needed to properly diagnose, treat and care for persons afflicted with emergent epidemics in China. Even more could be gained by promoting greater awareness and preventive messaging, not to alarm people, but to help them take the necessary precautions to protect against infectious diseases prevalent in China.

Finally, China and the international public-health community have a shared interest in scaling up cooperation and assistance programmes. There are numerous international health-related assistance programmes in China, but most operate at a relatively modest scale. Expanding successful programmes will require significant new funding. The World Bank may be one resource that could expand its support for health-related programmes in China, but major donor nations should also consider re-channelling development aid to focus more on public-health programmes. In the end, however, China—as one of the world's largest economies and an aspiring

great power—will need to show a greater commitment to working with international partners and to taking its public-health challenges more seriously.

The silver lining to the tragic SARS outbreak may be the attention brought to China's health-care system, and how China's health is a concern to the world. Given China's intensifying interaction with partners around the world, more concerted action will be needed to stem the spread of debilitating and even fatal infections from China, and ameliorate their effects on the economic wellbeing of China, the region and the planet.

* The writer holds the Freeman Chair in China Studies at the Centre for Strategic and International Studies in Washington.