

CHINA
Confronts
HIV/AIDS

中国力抗爱滋病

Drew Thompson

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Foreword

Asia and Eastern Europe are experiencing the most rapid growth in new HIV infections even though sub-Saharan Africa remains the region with the greatest HIV prevalence. Of the 4.8 million new HIV infections worldwide in 2003, Asia accounted for one in four. This vast region of diverse cultures, economies, and demographic trends is experiencing several distinct epidemics, some of them—like China's—at critical stages of development.

UNAIDS estimates that more than 7 million Asians are living with HIV, and that high-risk behaviors are fueling the spread of the virus. Most of those living with the virus in Asia became infected while injecting drugs with dirty needles or while buying or selling sex without using condoms. Indeed, the interaction between unsafe drug injection and unprotected commercial sex accounts for much of the sharp rise in new infections in Asia, the world's most populous region.

National surveillance data from some countries show that the epidemic is growing rapidly. For instance, the rise in HIV infections among intravenous drug users (IDUs) in Guangxi province in China has been followed by a rise in HIV among sex workers.¹ But why does HIV rise among sex workers a few years after it has begun to rise among IDUs?

Sharing needles is an efficient way to spread HIV. Therefore, HIV prevalence among IDUs tends to be high. In many places in Asia, one-half of all IDUs have HIV. And while many in the health community had believed that IDUs were not very sexually active, new data suggest the opposite is true.

Substantial proportions of male injectors in many Asian countries visit sex workers—more than 80 percent of male injectors in the Indonesian city of Surabaya, and more than 50 percent in Hanoi and central Bangladesh.² Most of these male injectors do not use condoms. In some countries, including Vietnam and parts of China, a high proportion of female sex workers are also drug injectors.

But Asian examples prove the epidemic can be beaten. Asian countries that have faced the facts and that have taken action provide some of the best examples of effective prevention in the world.

Because condom-use rates in commercial sex in Thailand are high, even the spread of HIV among IDUs there has not fuelled a sexually transmitted epidemic. In fact, in Bangkok, IDUs opt for condoms when visiting sex workers. Thailand's neighbor, Cambodia, has seen similar success with a program that has encouraged young people to avoid risky behaviors. Through public information campaigns, Cambodia's program has also tackled stigmatization of those infected with HIV; and it has actively encouraged men to use condoms when buying sex.

As these examples show, Asia has the opportunity to take on the AIDS epidemic as well as the proven ability to beat it. Countries that are beating the epidemic offer us three lessons:

- ▲ **Policymakers and program planners must tailor their response to the behaviors that are spreading the epidemic.** In Asia, these behaviors are drug injection, commercial sex, and sex between men. Countries that have succeeded have been pragmatic, not judgmental.
- ▲ **Services that directly reduce the risk of HIV transmission are essential.** Programs must move beyond leaflets and banners to providing easy access to condoms, lubricants, clean needles, and screening and treatment of sexually transmitted infections (STIs).
- ▲ While it is not necessary to provide these services to everyone, **the services should be made available to the great majority of the population engaging in high-risk behavior.** Twenty years into the HIV epidemic, small demonstration projects are not the answer.

There has been a lot of discussion about “access,” and especially about access to treatment for people living with HIV. Asia is in a fortunate position. In many countries, the number of people in immediate need of antiretroviral therapy is still relatively small because the epidemics are relatively recent. Thus, the countries of the region can aim to achieve high coverage for treatment while building up the systems they will need to reach more people in the future.

In countries such as China that can still shape the course of their epidemics, mounting successful prevention and treatment programs that target high-risk populations will be crucial to overall success. Given the sheer size of China’s population and the large numbers of at-risk persons, the country’s response will require substantial resources and attention. As Asian nations increasingly globalize and become more socially and economically interconnected, preventing the spread of HIV/AIDS in China will be central to slowing rising incidence across the region.

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Introduction

China, the world's most populous country, faces a number of important challenges as it strives to contain a large and growing HIV/AIDS crisis that experts fear could affect more than 10 million people by 2010.³ The epidemic in China, which had initially centered among intravenous drug users (IDUs) and former plasma donors, is exploiting new opportunities for transmission. Though only 0.1 percent of adults are infected,⁴ trends indicate a serious potential for the disease to expand throughout the country.

The disease in China has mainly affected IDUs in the southwestern provinces as well as rural people in central China who had sold blood and plasma in the 1990s to commercial collection centers (see Figure 1). However, sexual transmission of HIV is growing and accounts for a third distinct epidemic. Today, HIV/AIDS is present in all 31 provinces and regions of China, with cases reported in 48 percent of all counties at the end of 2003.⁵

Official estimates of the number of Chinese living with HIV/AIDS rose from 500,000 in 1999 to 840,000 at the end of 2003. According to Chinese government estimates, the main transmission routes as of 2003 were intravenous drug use, plasma donation, heterosexual transmission, and male-to-male sexual transmission.⁶ While intravenous drug use and plasma donation account for roughly 68 percent of infections to date, the proportion of infections occurring through sexual transmission has increased, and is expected to continue rising.

Increases in the sexual transmission of HIV and a rise in new infections among women, compared with increases among

men, provide some evidence that the epidemic is expanding from specific regions and at-risk groups into the general population.⁷ To prevent a generalized epidemic, China faces the challenge of implementing a comprehensive and multifaceted national response. Such a response must engage hard-to-reach and socially marginalized groups in testing, counseling, and treatment programs. These groups include IDUs, sex workers and their clients, men who have sex with men, and China's "floating population" of economic migrants. In addition, broad and targeted interventions that focus on the differing needs of men and women—including women's access to education and to economic opportunities—will be essential.⁸

Responding to the epidemic presents many dilemmas for the national government, however. Authorities in Beijing confront the challenge of reconciling a morally conservative, traditional approach to governance with a rapidly changing society where illegal activities or actions considered immoral, such as premarital sex and drug use, are increasingly widespread. In particular, the government faces the dilemma that it might appear to be condoning drug use or commercial sex by establishing HIV/AIDS treatment and counseling programs without also addressing the fundamentally illegal or "immoral" acts that place these populations at risk.

Since 2003, the Chinese government has more openly demonstrated its commitment to contain the epidemic, with the introduction of new policies and programs and additional funds, both from within China and from international donors. Recognizing the rapid spread of HIV/AIDS among intravenous drug users, health offi-

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Figure 1
Provinces in China Most Affected by Intravenous Drug Users
With HIV/AIDS



SOURCE: China's Country Coordinating Mechanism, "Reducing HIV Transmission Among and From Vulnerable Groups and Alleviating its Impact in Seven Provinces in China," *Round 4 HIV/AIDS Proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria*.

cial have instituted a number of programs that facilitate clean needle exchanges and provide substitution drugs like methadone. On the treatment side, the Global Fund to Fight AIDS, Tuberculosis and Malaria has supported China's efforts to distribute life-prolonging antiretroviral drugs for free to former plasma donors and others in central and northeastern China.

This report will describe China's three distinct epidemics and detail efforts by the Chinese government and the international community to contain the spread of HIV. The report will then examine the implications of the epidemic's current trends on future Chinese policy.

Three Distinct Epidemics

Adult HIV prevalence in China is an estimated 0.1 percent. However, given China's population of 1.3 billion, even low overall

HIV prevalence translates into huge numbers of people affected and a massive demand for resources that could pose serious social and economic challenges to the country. In addition, the overall low rate masks serious epidemics within a number of subgroups in specific geographic areas.

China's HIV/AIDS crisis is unique compared with epidemics in other parts of the world. The country faces not one but three distinct epidemics occurring among former plasma donors, IDUs, and through sexual transmission—both heterosexually and among men who have sex with men. According to 2003 Chinese government figures, intravenous drug use accounts for 44 percent of the cumulative registered HIV infections, plasma donation for 24 percent, and sexual transmission for 31 percent (heterosexual transmission 20 percent, and male-to-male sexual transmission 11 percent).⁹

These three epidemics present diverse challenges to government efforts to develop a coordinated national response.

These three epidemics present diverse challenges to government efforts to develop a coordinated national response, requiring not only different medical and public health interventions, but complex social and legal responses as well.

Infection Levels High Among Former Plasma Donors in Central China

China has focused much of its fight against HIV/AIDS on former plasma donors—villagers in roughly seven central provinces who contracted the virus at blood collection centers that operated until a government crackdown ended the practice in 1996.

Between the mid-1980s and mid-1990s, entrepreneurs paid poor farmers in Henan and other provinces for plasma—the liquid portion of blood that provides critical proteins for blood clotting and immunity. The farmers, who were not tested for HIV or other blood-borne infections, gave blood to collection centers, which pooled the blood of several donors, separated the plasma, and injected the remaining blood back into individual donors to reduce anemia.

This risky practice of pooling and transfusing blood back to multiple donors meant that an infection from just one person could spread to many others on a single visit. Farmers often would remain for weeks at the centers, making repeated donations for cash. Farmers from across China traveled to donation centers in several provinces, and as many as 230 plasma collection centers existed in Henan province prior to the 1996 ban.¹⁰

While the HIV/AIDS epidemic involving these former plasma donors is largely concentrated in central China, it is not limited to that region. By 2003, 30 of China's 31 provinces had reported HIV infections through blood and plasma donation. HIV varies widely among for-

mer plasma donors, reaching as high as 60 percent in some Henan villages. Many of these people's illnesses have progressed to AIDS and thousands have died of the disease.¹¹

The government places the total number of people with HIV in Henan at about 35,000,¹² but other estimates are much higher. In 2003, the Aizhi Health Education Institute estimated some 34,000 HIV infections and up to 3,000 AIDS-related deaths in just one county in the province.¹³ In July and August 2004, the Henan provincial government carried out an extensive surveillance of 260,000 former blood and plasma donors, uncovering 25,036 people with HIV.¹⁴ These levels of infection help illustrate the extent of the problem in some rural areas where plasma donation occurred.

The high HIV prevalence in these hard-hit areas presents unique challenges for local governments. The economic and social impact is significant. Farmers become too sick to tend their fields and travel to market, or they migrate to cities to work in factories, leaving family members without financial support. As seen in other areas of the world, AIDS ravages the social fabric of villages, forcing extended family members to care for orphans when relatives have died or become incapacitated.

The actual number of children affected by HIV through the loss of one or both parents is difficult to determine in China, however. The United Nations estimates that throughout the country, living AIDS orphans—children under age 15 who have lost at least one parent to AIDS—numbered some 76,000 at the start of 2002.¹⁵ Without a social security system, health insurance, or life insurance for the majority of Chinese peasants who have HIV, affected families depend on the government to provide care and support, a situation that creates immense pressure on local administrations.

Drug Use Fuels Spread of HIV

The use of contaminated needles when injecting illicit drugs provides the most common HIV transmission route in China. Government estimates show that as of 2003, IDUs accounted for 44 percent of adults living with HIV/AIDS.¹⁶ Prevalence had reached 89 percent of intravenous drug users in Yili, Xinjiang in 2003 and was more than 20 percent of drug users in Guangxi and in Yunnan—the province that reported the first domestic HIV case among drug users in 1989.¹⁷ By 2002, all 31 Chinese provinces were reporting infections among drug users.¹⁸

Intravenous drug use accelerated after China began reforming its economic system in 1979, an effort that opened the country's doors to foreign trade, travel, and investments. Heroin and opium entered the country from the “golden triangle”—the poppy-growing border area of Myanmar, Laos, and Thailand. Heroin use steadily spread from the Yunnan border area along trafficking routes to Xinjiang in western China and to prosperous provinces and international shipping ports in eastern China. Today, more than 1 million drug users are registered with China's Public Security Bureau, although some estimates place the total at around 3 million.¹⁹ Around half of China's drug users are believed to inject drugs.

Many drug users heighten their risk of HIV and other infections by engaging in risky behavior, such as needle sharing. To support their habit, some resort to commercial sex work, which provides a conduit for HIV to enter the nondrug-using population.

Sexual Transmission of HIV Increasing

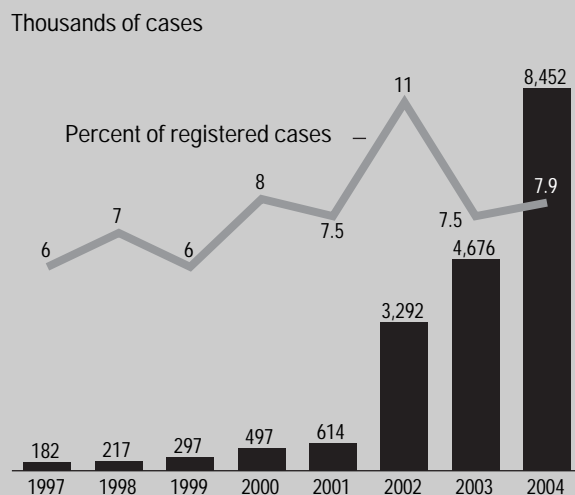
Current trends indicate that sexual transmission of HIV will increasingly fuel the epidemic in China. While the concentration of HIV among IDUs and former

plasma donors is significant, both groups have been relatively isolated geographically and socially and will potentially be overshadowed by infections spread through high-risk sexual contact throughout China. The proportion of HIV infections that were heterosexually transmitted increased from 6 percent in 1997 to 11 percent by the end of 2002, raising concerns that this third epidemic would ultimately overtake the others (see Figure 2).²⁰

Studies indicate that high-risk behavior is occurring widely. Large numbers of female sex workers and their clients report that they seldom use condoms, while young people in urban areas increasingly engage in premarital sex with multiple partners.²¹ Studies also indicate that in addition to HIV, other sexually transmitted infections (STIs) are increasing significantly in the general population.²² In addition to being serious illnesses themselves, STIs facilitate the sexual transmission of HIV infection.²³

There are no definitive estimates either of the number of men who have

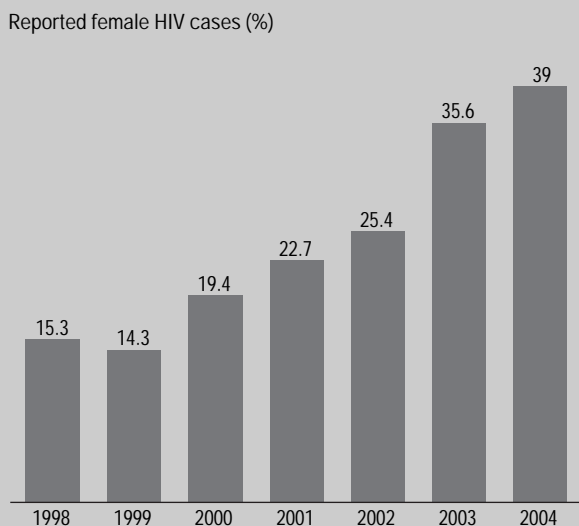
Figure 2
Cumulative HIV Infections Through Sexual Transmission in China



Note: The 2003 drop in percentage of registered sexual cases reflects a large increase in former plasma donors who are now registered through the China CARES drug treatment program.

SOURCE: Adapted and updated from United Nations and China Ministry of Health data available through the end of September 2004.

Figure 3
Reported Female HIV Cases As Proportion of All Cases, 1998–2004



SOURCE: China's State Council AIDS Working Committee Office and United Nations Theme Group on HIV/AIDS in China, *A Joint Assessment of HIV/AIDS Prevention, Treatment, and Care in China, Dec. 1, 2004* (www.unchina.org, on Dec. 2, 2004): 4.

sex with men in China or HIV prevalence among this group. The limited data available estimate a range between 1 percent and 7 percent.²⁴

A primary concern is that high-risk behavior—particularly sex without condoms—may be prevalent among men who have sex with men in China, and that little or no HIV prevention information is available to this group. Behaviors associated with male-to-male sex in China are not socially accepted, a situation that makes men who have sex with men even more difficult to identify and reach with prevention education or voluntary HIV testing and counseling services. This situation creates significant potential for an HIV epidemic within this population. In China, men who engage in sex with other men may be married or may have other heterosexual relationships and therefore represent a potential “bridge population” that could spread HIV to girlfriends, wives, and children.

Women Face Increasing Impact of HIV

Chinese government officials have increasingly expressed concern that HIV is spreading from groups with high-risk behaviors into the general population through sexual transmission. The increase in heterosexually transmitted infections is reflected in the growing proportion of women who have HIV, and it signals a maturing epidemic that increasingly mirrors trends seen in countries at more advanced stages in the global pandemic.

Global experience has shown that HIV/AIDS epidemics affect increasing numbers of women as time progresses. In 1997, 41 percent of adults living with HIV/AIDS worldwide were women.²⁵ Today, women constitute close to half of the 37.8 million people living with the virus.²⁶ Some 57 percent of infected adults in sub-Saharan Africa are women, and in North America, the percentage of HIV-infected women rose from 20 percent in 2001 to 25 percent in 2003.²⁷

The British Department for International Development (DFID) reports that in China, between 1990 and 1995, the male-female ratio of people living with HIV/AIDS was 9 to 1. Estimates in 2001 showed the gap had narrowed to roughly 3.4 men to 1 woman.²⁸ More recent estimates reflect a similar pattern. A joint assessment by the Chinese Ministry of Health and the Joint United Nations Programme on HIV/AIDS (UNAIDS) shows that the ratio of reported infections went from about 5 men to 1 woman during 1995–1997 to about 4 men to 1 woman by 2001 (see Figure 3).²⁹

The increase in registered and estimated cases of women infected in China reflects not only the spread of HIV into the general population but also increased

screening of former plasma donors in central China and improved surveillance among female sex workers. The ministry of health has improved screening of pregnant women at neonatal clinics throughout the country, placing particular emphasis on surveillance in high-prevalence areas. The growth of infections among women raises the concern that growing numbers of children will become infected with HIV.

Women's Physical Vulnerabilities and Soaring STI Rates

As heterosexual transmission of HIV increases and the epidemic moves from specific regions and at-risk groups into the general population, there is heightened concern that the virus could more easily prey on women and young girls, who are particularly susceptible to infection with HIV and other STIs because of the interplay of economic, social, and biological factors.

Anatomical differences make transmission of the virus through sexual contact far more likely from men to women than vice versa. Research shows that the risk of infection with HIV during unprotected sex is two to four times higher for women than for men.³⁰ This is primarily because the lining of a woman's vagina and cervix contains a large area of mucous membranes—thin tissues through which HIV and other viruses can pass to tiny blood vessels and enter the bloodstream. Infected semen also typically contains higher concentrations of the virus than a woman's sexual secretions.

If either partner has an STI, the risk of HIV infection through sexual intercourse increases dramatically. In China, STIs have increased rapidly since the mid-1980s. Reported cases of STIs soared from 5,800 in 1985 to 836,000 in 1999.³¹ However, Chinese experts estimate that these figures represent only about 10 percent of STIs,

since many sufferers seek treatment in discreet, private clinics and are not captured by the national STI reporting system.

Studies have shown that STIs, particularly infections that cause ulcerations of the vagina, greatly increase a woman's risk of becoming infected with HIV.³² High rates of STIs in the general population also provide important indications about the presence of high-risk behavior and are an epidemiological marker for HIV/AIDS.³³

Women's Social Vulnerability

While women and girls are more vulnerable than men to HIV infection because of biological differences, the social, cultural, and economic factors that limit their ability to avoid the risks of infection are more significant. Social changes in China over the last two decades have significantly increased the risk of infection for many Chinese and for women in particular. While economic development has benefited many people since the country began reforming its economy and opening its doors to foreign trade in 1979, the government no longer provides universal social services to the Chinese population. Personal mobility has also increased, and illicit behaviors such as commercial sex are rising.

Migration

With the elimination in China of food-ration coupons in the 1980s and the decreasing importance of state-owned enterprises that offer workers security and benefits, Chinese people have increasingly left their places of residence for other parts of the country in search of work. The closing of many Chinese state-owned enterprises has also allowed a private-sector economy to flourish, providing new economic opportunities, particularly in urban areas. Because of this increased freedom of movement, millions of rural people, many of them with little other than agricultural

skills and experience, have left their villages in search of work (see Box 1).

Migrants, however, are particularly vulnerable to HIV infection. Lacking any health insurance or access to social services and social welfare programs, these migrants lack HIV prevention information and basic health care. Far from the social constraints of their homes, migrants join new peer groups, including sexual networks. Also, migrant women and girls are often more vulnerable than their nonmigrant counterparts to some kind of transactional sex as they try to negotiate employment, food, or a place to live.

Commercial Sex

People who engage in commercial sex are at high risk for the sexual transmission of HIV. For women with limited education or job skills, sex work can be a lucrative alternative to manual or semiskilled labor in factories or on job sites. Though it is illegal, commercial sex is common in urban and many suburban areas in China. Transactions take place in what the government refers to as “entertainment establishments,” which can include hotels, massage parlors, beauty parlors, restaurants, or *karaoke* halls. Some estimates place the number of sex workers in China at around 3 million.³⁴ However, others

Box 1: China’s Floating Population

Since 1979, China’s borders have increasingly opened, resulting in massive flows of people to and from the country. Also, an improved economy has enabled increasing numbers of Chinese citizens to travel domestically and internationally, generating an unprecedented level of commerce within China and between the world and China’s provinces.

Before reform and opening, China’s system of household registration, the *hukou*, restricted citizens in rural areas from moving to other provinces or to urban areas. The restrictions meant that migrant workers lacked access to social services that urban residents enjoy, including food ration coupons, schooling, and medical care. Urban work units, called *danwei*, controlled the movement of workers, whose personnel files could only be transferred to another unit under special circumstances that required approval from the appropriate authorities.

Beginning in the late 1980s, several provinces relaxed the *hukou* system, permitting increased rural-to-urban migration. Since the late 1990s, provincial identification systems have permitted residents to work anywhere within their provinces. However, while educated professionals are generally free to work in cities of their choosing and have the resources

for adequate medical care, most rural migrants have no health insurance and little disposable income to pay for medical treatment. Away from their registered residence, migrants do not qualify for subsidized care and have little access to fee-for-service clinics in the cities.

This “floating population” (*liudong renkou*) comprises more than 100 million rural people who migrate to cities in search of work¹ and who are extremely vulnerable to HIV infection. These migrants are largely young, poorly educated, in the sexually active period of their lives, and have little access to HIV prevention information.

Male migrants make up the largest proportion of the floating population and are frequently away from home for 50 weeks a year, living in single-sex dormitory housing and working long hours in difficult conditions.² They are easy targets for drug sellers and have ample opportunities to interact with sex workers. Being far from home, they are also less constrained by the conservative mores of their home villages.

Migrants are potentially a “bridge” population for spreading HIV from groups with high-risk behaviors to the general population and for spreading the virus from high-prevalence to low-prevalence areas.

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AIDS posters in a red light district in Sichuan.

believe the numbers of women who engage in casual or infrequent transactional sex could be considerably greater, ranging as high as 5 million.³⁵

Many sex workers are migrants, who often lack the ability to negotiate safe sex. Sex education is generally not taught at primary or middle schools in China, and cultural conservatism limits discussion of sexual matters within families. Because of the illegal nature of their work, sex workers are difficult to identify and reach with health messages. This hinders efforts to educate sex workers about HIV/AIDS, to supply them with condoms, and to test them for HIV and other STIs.

The Chinese Ministry of Health estimates that 1.3 percent of sex workers had HIV in 2002. Other experts have estimated that the infection rate is almost 11 percent and 5 percent in Guangxi and Yunnan provinces, respectively.³⁶

Condom use is low among Chinese sex workers and their clients.³⁷ Even if they know of the risks of unprotected sex, female sex workers often lack the power to insist on the use of condoms with their clients. Data collected at various sites in the country show that only about 10 percent of sex workers reported that they

always use condoms, while close to one-half said they had never used condoms.³⁸ Many sex workers are afraid to carry condoms because police in some jurisdictions consider possession of condoms evidence of sex work. This policy presents significant challenges to organizations that promote the use of condoms

Compounding the risk of unsafe sex for sex workers is the problem of drug use. Chinese government surveys indicate that 1.4 percent of sex workers throughout the country are IDUs and that 38 percent of those share needles. Much higher percentages of sex workers in China's southwestern provinces also inject drugs, increasing the risk of HIV infection.³⁹ Drug and alcohol abuse also place sex workers at increased risk, reducing their ability to negotiate safe sex and increasing their economic dependence.

Limited Education

Limited government investments in education may exacerbate male-female disparities by passing many costs on to parents. In 2000, China spent only 2.2 percent of the country's gross domestic product on education—below the 3.2 percent average for East Asian developing countries.⁴⁰ Education provision is therefore highly dependent on the fiscal capacity of individual localities, which inevitably have to charge fees to students to cover expenses. Many families with limited resources are unable to pay school fees, thus many children drop out before they can complete the nine years of primary education stipulated in the Chinese constitution.⁴¹ For families with more than one child, a traditional preference for boys means that a daughter's education is more likely than that of a male sibling to be cut short. One survey in a northern Chinese village found that 87 percent of females drop out of school before age 15, compared with 40 percent of males.⁴²

Women are at greater risk of HIV infection because of these educational disparities. They have less economic security, fewer work opportunities, and are more vulnerable to human trafficking and coerced transactional sex work. Most important, lower levels of education relative to men limit women's ability to make the critical, informed choices that can limit their vulnerability.

More Commitment, New Programs, Policies, and Challenges

Regardless of the nature of China's epidemic, the global experience indicates that committed top-level leaders as well as the involvement of other levels of government are key elements of any successful national effort to contain the spread of HIV/AIDS.

China's national government has taken a number of steps that reflect an increasing willingness to address some of the complex social and political issues linked to the HIV/AIDS epidemic. The leadership was undoubtedly motivated by an unrelated public health outbreak in 2003. China's top leaders mobilized massive resources to control the spread of severe acute respiratory syndrome (SARS), which the World Health Organization says began in November 2002 in southern China and ultimately affected some 29 nations by the summer of 2003. This public health challenge threatened economic and social stability, taking more than 900 lives in four countries alone.⁴³

China's current leaders took office between the 16th Party Congress in November 2002 and the National People's Congress in March 2003 amid much speculation about how they would make their imprint on the country's domestic and international policies. During this transi-

tion period, SARS was rapidly spreading from its origin point in South China to Beijing and Hong Kong. It was not until after the completion of the National People's Congress that the government acknowledged the significance of the epidemic and acted decisively to confront the looming public health challenge.

Once the threat of SARS had receded by the summer of 2003, top leaders took a more visible role on HIV/AIDS prevention and treatment issues—an indication that they had taken to heart key lessons learned from SARS: the futility of covering up the extent of the epidemic, the poor state of the public health system, and the socioeconomic impact from the unchecked spread of disease. The government's aggressive, albeit belated, response to SARS presaged a markedly stepped-up commitment to address the HIV/AIDS epidemic.

Coordinating a National Response

China's Ministry of Health has been at the forefront of efforts to confront the HIV/AIDS epidemic. However, the lack of coordination between elements of the bureaucracy has hampered the implementation of the kind of comprehensive program that addresses HIV/AIDS as a broad social problem rather than as a primarily medical issue. For example, the State Council, China's cabinet, created an HIV/AIDS committee in 1996 headed by then Vice-Premier Li Lanqing. However, this "State Council Coordinating Committee to Prevent and Control HIV/AIDS" met only four times.⁴⁴

Clear efforts are now being made to stimulate broad coordination. A new State Council AIDS Working Committee, which first convened in February 2004, includes representatives from 23 ministries, commissions, and the vice governors of Guangdong, Guangxi, Sichuan, Yunnan, Xinjiang, Henan, and Hubei provinces.⁴⁵

Headed by Vice-Premier Wu Yi, the committee occupies a stand-alone office within the health ministry and is expected to convene regular meetings of key ministries in the national response to HIV/AIDS.

In addition, the State Council announced new HIV/AIDS prevention and control policies in April 2004. Key policies include authorization to carry out “harm-reduction” strategies to try to change risk-taking attitudes and behaviors. These strategies include promoting condoms at entertainment establishments; setting up needle-exchange programs; and offering methadone (a treatment substitute for addicts of heroin and other opiate narcotics).

The central government’s centerpiece policy is known as the “four frees and one care” policy. Under the policy, the government has committed to providing farmers and impoverished people free antiretroviral drugs, free voluntary HIV testing and counseling, free prevention of mother-to-child transmission, free schooling for AIDS orphans, and care for AIDS patients and their families. Provinces and their counties are required to raise funds to support the implementation of these new policies.

Since HIV/AIDS is most serious in the poorest regions, it is uncertain if all policies will be uniformly or successfully implemented where they are needed most.⁴⁶ Dealing with HIV at the local level requires mobilization of numerous government departments to treat the disease and to address the social and economic impacts of the epidemic. Coordinating committees at the provincial and county levels of government meet regularly to coordinate plans to control and prevent the spread of infection.

Addressing the Social Challenges

The government has taken a number of steps that represent an increasingly open attitude and a willingness to address complex social issues:

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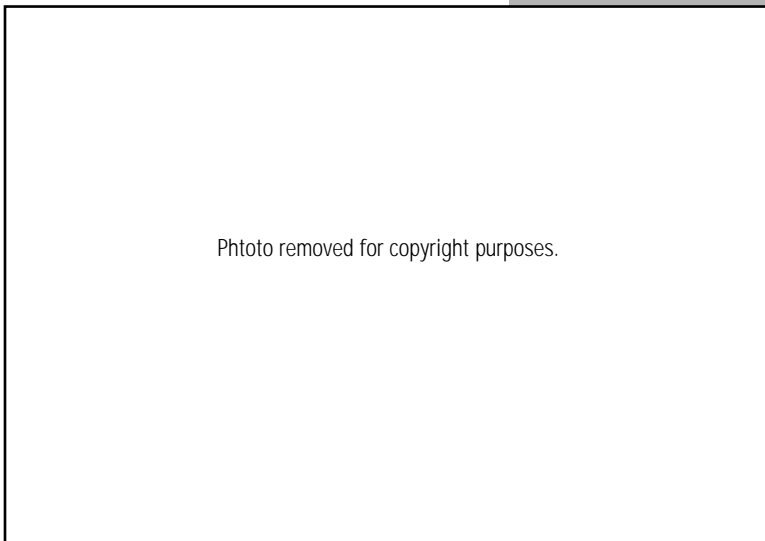


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Condoms for sale in a Yunnan hotel room.

- ▲ Chinese health authorities have secured funds from the Global Fund to Fight AIDS, Tuberculosis and Malaria to incorporate HIV-positive IDUs and sex workers in southwestern and western provinces into a national program. Interventions are to include treatment and prevention counseling and harm-reduction programs, including clean needle exchanges and treatment for drug users.⁴⁷
- ▲ Officials are gradually dismantling restrictions on rural-to-urban migration and restrictions on the ability of migrants to access health care and other services at their new locations. These reforms could allow more families to migrate together and could provide more legitimate economic opportunities for female migrants, thereby reducing the likelihood that they would rely on commercial sex to survive.
- ▲ A nationwide ban on condom advertisements was lifted in 2003. In December of that year, China Central Television (CCTV) aired the first condom commercial authorized by

Sex education is slowly being introduced in some secondary schools.

the central government since a single ad aired in 1998.⁴⁸ With the ban lifted, television stations have increasingly discussed sensitive issues. For example, in April 2004, CCTV aired a two-part story about condom marketing in hotels and entertainment establishments in Yunnan province. The story included an interview with the director of the Yunnan provincial police academy.⁴⁹

- ▲ Sex education is slowly being introduced in secondary schools in some parts of China to educate young people about risks and modes of transmission of HIV.

Care for Former Plasma Donors

One of the government's main actions has been the distribution of life-prolonging antiretroviral drugs for free to former plasma donors in nine provinces in central and northeastern China.

The China Comprehensive AIDS Response or "China CARES" program is the flagship national effort to address the needs of these former plasma donors who contracted the virus. The program aims to provide free and subsidized HIV testing, counseling, and antiretroviral treatment to affected communities and individuals. It operates through clinics run by the China Center for Disease Control and Prevention (CDC) at the provincial, county, and township levels.

Government officials have also responded to the intense poverty in Henan province—the epicenter of the epidemic involving plasma donors—with a program known as "six ones." Under the program, the government has committed to building one road, one water well, one school, one health clinic, one orphanage, and one education room in all Henan villages affected by HIV/AIDS.⁵⁰

Effectively implementing a national program such as China CARES with local

initiatives such as "six ones" requires purposeful coordination between the central government and the provinces and presents unique challenges, particularly for local government officials. Long-term success of these programs will therefore be predicated on sustained, top-level political support and dedication of resources to the HIV/AIDS issue in general and the China CARES program in particular.

Expansion of the China CARES Program

The China CARES project grew out of China's increasing willingness to openly address the AIDS crisis. The program initially sought to establish treatment and care programs in the more than 50 counties that were hardest hit by HIV (see Figure 4). However, the target grew to 127 counties as estimates of the numbers and distribution of former plasma donors in rural areas increased. The program now provides HIV treatment and care to others who need it, including IDUs and sex workers.⁵¹

Through the program, patients receive subsidized clinical tests, free domestically manufactured antiretroviral drugs to fight AIDS, and other medication to treat tuberculosis and other infections. To qualify as a China CARES site and be eligible for funds, each county must set up a coordinating committee and must develop short-term and long-term plans.

Officially launched in 2003, the program trained three doctors from each of the participating counties for about three months. Following the training, provincial, county, and township clinics received domestically manufactured antiretroviral drugs. Each county also received a quota of patients, as the program sought to identify and begin treating 5,000 people by the end of September 2003. By the end of October, Chinese CDC officials reported they had indeed met the quota, with 5,289 persons initiating treatment. However, officials noted that more than 1,000 of

Figure 4
Provinces With China CARES Sites Treating Former Plasma Donors



SOURCE: China's Country Coordinating Mechanism, "China CARES (Comprehensive AIDS Response): A Community-Based HIV Treatment, Care, and Prevention Program in Central China," *Round 3 HIV Proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria*.

these patients had subsequently died or had left the program because of adverse effects of the antiretroviral treatment.⁵² By the end of June 2004, more than 10,000 people in the participating provinces had received free antiretroviral therapy.⁵³

Effective implementation of the China CARES plan requires the participation and coordination of numerous government bureaus. Some pilot sites have provided useful models for other counties, and the CDC-operated China CARES clinics act as focal points for a number of services:

- ▲ Family planning departments provide free condoms to the clinics for distribution to patients with HIV.
- ▲ County officials maintain lists of children who have at least one parent with HIV and coordinate with schools and education bureaus to ensure that students receive free education.

- ▲ The civil affairs bureau provides subsidies to affected children and operates orphanages for children whose parents are incapacitated or dead.
- ▲ Public security officials play a role in facilitating outreach and counseling for sex workers, including the implementation of campaigns calling for 100 percent condom use at entertainment establishments.

While local governments in heavily affected areas are under pressure to deliver comprehensive services and administer programs, many lack adequate capacity and support. The central government therefore provides some support for pilot sites to train doctors, build medical infrastructure, and help local governments develop management systems and programs to distribute drugs and condoms and educate family members of infected people.

International support for the China CARES program has come from the Global Fund to Fight AIDS, Tuberculosis and Malaria and from organizations such as the Global AIDS Program of the U.S. Centers for Disease Control and Prevention and the U.S. National Institutes of Health. International organizations have also trained government officials and funded programs to support comprehensive care. The United Nations Development Programme convened a seminar in 2004 to help various levels of government in Hubei province increase coordination between departments in addressing HIV/AIDS. Officials from provincial, municipal, and county governments participated with representatives from local coordinating committees, including cadres from the health,

public security, judicial, civil affairs, and tourism sectors.⁵⁴

The World Health Organization (WHO) has also provided funding to China CARES sites in Hubei to set up “Warm House” centers at CDC clinics. These centers are meeting rooms for HIV patients to gather and support one another, share health information, and discuss home-care options. This model is expected to increase family involvement in prevention activities and ensure greater adherence to antiretroviral treatment regimens.⁵⁵ Efforts such as these contribute to the capacity of local officials in Central China to create a broad response to HIV/AIDS.

While the combination of financial and technical support from international sources should boost the potential effec-

Box 2: Life-Prolonging Drugs Carry Benefits and Challenges

Established treatment programs with affordable life-prolonging drugs provide important entry points for voluntary testing and counseling. Without access to treatment, individuals lack motivation to get tested. The availability of treatment therefore provides an incentive for people to know their status and creates opportunities for health officials to counsel and train individuals and families in HIV prevention and care.

At the same time, the provision of complex HIV treatment presents a number of risks, particularly when few doctors, nurses, counselors, and lab technicians have been trained to respond to the epidemic and when vital equipment is lacking. A significant concern about the China CARES program is that the initiation of antiretroviral treatment without adequate medical and social counseling will increase the risk of patients developing and spreading drug-resistant strains of the virus.

One recent study found that 59 percent of patients in one county in Henan, and 28 percent

in one county in Anhui, developed drug resistance within nine to 12 months of treatment.¹ The World Health Organization (WHO) notes that while drug resistance can be considered a natural response to the selective pressure of drug treatment, drug resistance could be exacerbated by abuse, underuse or misuse of the treatment regimen, poor patient compliance, and poor quality of available drugs.

Studies estimate that between 90 percent and 95 percent of all doses must be taken by the patient in order to reduce the development of drug-resistant strains of HIV.² Reaching this level of adherence among their rural patients is a challenge for the doctors associated with the China CARES program. With as many as 20 percent of patients in the program dropping out of treatment and unknown numbers taking their medicine improperly, the risk of drug-resistant HIV strains emerging in China is significant.

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tiveness of the China CARES program as it evolves from an emergency response to a standardized treatment program, the financial demands of the program present a long-term burden to the government. Current international financial support will provide primarily medical infrastructure and short-term supplies of drugs, not the supplies that patients need for the remainder of their lives. If financial commitment drops off over time and patients are increasingly forced to shoulder the burden of medication and associated treatment expenses, significant numbers of people are likely to drop out of treatment, increasing the likelihood that resistant viruses will spread (see Box 2).

Reaching Marginalized Groups With High-Risk Behaviors

While China has established prevention and treatment programs for HIV-infected former plasma donors, the country's national response has fallen short of a more comprehensive approach to addressing the broad issues of other affected and at-risk groups. Former plasma donors are relatively easy to identify in villages and townships where they live, because they did not become infected through illicit or "immoral" activities. To prevent a generalized epidemic, however, China must also engage drug users, sex workers, migrants, and other marginalized groups in testing, counseling, and treatment programs. However, these populations are more difficult to reach and present a challenge in designing effective prevention education programs.

For example, the illicit nature of drug use makes drug users hard to identify and reach with educational messages and other services. Involving migrants and minorities in prevention and treatment programs also presents special challenges, since many migrants and minorities do not speak Mandarin (China's official dialect), while migrants typically have no legal status in

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Lab technician at Hubei Provincial Center for Disease Control.

their new location and are reluctant to engage with government officials.

For their part, sex workers and their clients also present a dilemma for the government, because of the difficulty of communicating to local officials that commercial sex is anything other than illegal and because sex workers are a highly mobile group. Hence, the national government has found itself unable to move from offering limited pilot projects to effectively implementing a 100 percent condom campaign targeting sex workers.

Balancing Law Enforcement With Prevention and Care

While the policy environment for implementing harm-reduction programs for drug users and sex workers is improving, tension between various departments remains over the best practices to reduce the spread of HIV/AIDS among these populations.

Public security authorities are particularly sensitive about programs that may be construed as condoning illegal activities. While effective implementation of harm-reduction programs requires the active par-

participation of relevant local communities, including mayors, the court system, and public security officials, these communities may perceive needle-exchange programs, methadone programs, and condom distribution as being at odds with the bid to legally crack down on drug dealers, drug users, and sex workers. Also, inconsistent implementation of policies, such as the periodic “strike hard” campaigns, whereby public security officials enact zero-tolerance campaigns by arresting drug users and sex workers, can seriously undermine the long-term success of programs.

At the same time, law enforcement does have a role to play in harm-reduction strategies. Public security organizations have regular access to intravenous drug users through their network of detention centers. Drug users detained by the Public Security Bureau and the Justice Bureau may be sent to detoxification centers for up to six months or to reeducation through labor camps for up to two years.⁵⁶

Labor camps, which may receive limited funding from the central or provincial governments, generate revenue through fines levied on new detainees and through daily fees for room and board. The centers earn additional income by putting inmates to work to produce goods that are sold in domestic markets. The camps’ reliance on inmates to generate operating revenues poses challenges for HIV/AIDS education and methadone programs. Camp operators have little incentive either to suspend work for HIV education and training or to purchase methadone for inmates. However, increased government commitment, including funding for these camps and education and methadone programs within the centers, can improve the management of the detention system and its effectiveness in treating those with HIV and AIDS. Under the Global Fund program that focuses on drug users in south-western China, the government hopes to expand outreach to registered and unregis-

tered intravenous drug users, including those in and out of detoxification centers.⁵⁷

Authorities in affected areas also hope to employ a number of harm-reduction strategies that target drug users and sex workers. Strategies include efforts to change risk-taking attitudes and behaviors:

- ▲ Providing intravenous drug users with information about HIV transmission.
- ▲ Distributing condoms.
- ▲ Offering methadone. Nine methadone clinics currently operate in seven southern and western provinces, serving roughly 1,800 drug users. Methadone is generally provided at reduced cost to the user either by the government or by a non-governmental organization (NGO) operating the facility. By 2008, more than 1,000 clinics are expected to serve up to 300,000 heroin addicts.⁵⁸
- ▲ Legalizing needle exchanges. The policy environment for harm reduction in China has been liberalized, allowing local authorities to embark on needle-exchange programs. Yunnan province has already legalized the approach, with other jurisdictions expected to follow in the near future (see Box 3). Similar programs will increasingly be implemented in the six other provinces where HIV infection among drug users is most prevalent.

The current strategy is to focus efforts on methadone clinics for urban drug users and clean-needle exchanges for rural drug users.

Financial Commitments

Meeting the challenge of HIV/AIDS has required significant increases in China’s national and provincial budgets. China’s annual national budget for HIV/AIDS in 2002 was approximately RMB 100 million (US\$12 million). This amount was supplemented in 2003 by an additional RMB

270 million (\$32.5 million) that was directed to hard-hit areas. In 2004, the total central government budget shot up to RMB 810 million (\$97.5 million).⁵⁹

Provincial governments are also increasing their financial commitments to HIV/AIDS programs. Areas with the most serious epidemics are supplementing their budgets with grants from the central government and loans and donations from international organizations. Estimates for local budgets vary widely, with the British Department for International Development estimating provincial and local-level investments in HIV/AIDS programs at approximately RMB 400 million (close to US\$50 million) in 2002, while UNAIDS estimated that local governments contributed RMB 179 million in 2003.⁶⁰ As national attention to addressing the HIV/AIDS challenge

intensifies, local budgets will likely rise according to local requirements.

China's HIV/AIDS programs have also benefited from international resources. The Global Fund to Fight AIDS, Tuberculosis and Malaria has boosted China's available resources for HIV/AIDS prevention and treatment programs in provinces with epidemics among former plasma donors and in areas with epidemics among IDUs and sex workers. The US\$113 million that the fund has committed to China is divided between HIV/AIDS and tuberculosis. Disbursements began in 2004, and another \$160 million will be made available if the grants yield results in the first two years.⁶¹

Programs for intravenous drug users and sex workers in seven southwestern provinces are meant to reduce the spread

Box 3 : Yunnan's 'AIDS Law' and Harm-Reduction Strategy

A 2004 law known as the "Responsive Measures for HIV/AIDS Prevention in Yunnan Province" establishes a full suite of policies designed to address HIV/AIDS in the province. The law legalizes clean-needle exchanges and methadone therapy, requires all hotel and entertainment establishments to make condoms available to patrons, and protects the rights of people who are HIV-positive.

To promote needle-exchange programs, drug users are educated about HIV transmission and the importance of using clean needles and of not sharing needles with other users. Users are encouraged to purchase new needles at pharmacies or to obtain free needles or vouchers for needles at exchange centers set up by the province. Yunnan province has also set up pilot methadone therapy centers, where drug users who are over the age of 18, who have served in detention centers twice before, and who are local resi-

dents can obtain methadone to substitute for their addiction to heroin.

The Yunnan law calls for a number of other important measures. For one thing, it promotes the availability of condoms in hotels, dormitories, and at entertainment establishments. The Public Health Bureau now has the authority to fine hotel and entertainment establishments for not making condoms available.¹

In addition, the legislation requires that individuals and entities such as clinics and companies maintain the confidentiality of a person's HIV status.² Other provisions relate to the officials' responsibilities to carry out and enforce the directives. The legislation stipulates punishments—including fines—for government and health officials and doctors who ignore the AIDS law, fail to perform HIV/AIDS surveillance, refuse to treat patients with HIV and AIDS, disclose patients' personal details, or distribute antiretroviral medicine without approval.³

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While there is great interest in scaling up small programs, few examples of expansion exist.

of HIV/AIDS through a number of activities and free services, including prevention education, voluntary HIV testing, condoms, antiretroviral drugs, treatment for opportunistic infections, methadone maintenance therapy, and needle and syringe exchanges. A key goal in the first two years is to test 400,000 people for HIV and to initiate antiretroviral treatment for 15,000 to 25,000 people. A longer-term goal is to offer treatment to 45,000 to 50,000 people by the project's fifth year. Some funding will also go to people living with HIV/AIDS and to the groups they organize, and to NGOs and community-based organizations not affiliated with the government.⁶²

While China has shown an increased commitment to addressing HIV/AIDS, enlarged national and local budgets and international support still fall short of projected needs. UNAIDS estimates that China will require between RMB 3.1 billion and 5.2 billion (US\$387.5 million to US\$650 million) in order to carry out programs that meet the objectives outlined in China's medium- and long-term plan by 2010.⁶³ In 2002, the National AIDS Office within the China Center for Disease Control and Prevention projected that China would need RMB 3.24 billion (US\$395 million) between 2001 and 2005 "to achieve 'reasonable coverage' of prevention programs alone."⁶⁴

Enhancing the National Response

While several measures undertaken in China represent promising steps toward strengthening political leadership and coordinating national prevention and treatment programs, the government could strengthen its response in a number of areas.

Party leaders could establish a leading small group (*lingdao xiaozu*) on HIV/AIDS to help maintain sustained

coordination at the highest levels of government and assist in the development of new policies.

Leading small groups have been formed to address major foreign and domestic policy challenges, including public health issues such as bird flu, SARS, and schistosomiasis. A *lingdao xiaozu* made up of politburo members, including Premier Wen Jiabao, would ensure consensus at the highest levels of the party, provide impetus to the AIDS prevention working committee, deepen and broaden commitment at the highest levels of government, and ensure that lower levels of government are accountable and implementing appropriate policies and programs.

Enacting key legal reforms would also enhance the national effort to prevent the spread of HIV/AIDS and increase economic security and stability for many of China's citizens. In addition to revising the system of residence permits for rural-to-urban migrants, other legal reforms could protect the rights of people with HIV. While several jurisdictions are debating or enacting "AIDS laws," a proposed national AIDS law would provide a framework for all jurisdictions. For people living with HIV and AIDS, such legislation could strengthen their right to work, the right to have their HIV status kept confidential, and the right to treatment and social services.

The government's response must also take into account the role of civil society in addressing the HIV/AIDS crisis. Reform of corporate and personal income tax laws could introduce financial incentives for donating to charities. Additionally, increased decentralized economic support for HIV/AIDS would enable more grassroots organizations to take a role in providing social services and in implementing programs for affected populations, particularly those marginalized groups that the government has a hard time reaching.

One overlooked area in the national response is the role of businesses to edu-

cate their workers about HIV/AIDS prevention. Foreign-invested businesses interested in implementing education programs for their workforces frequently find their local partners and staff resistant to addressing sensitive and personal issues at work. Public statements from senior leaders such as Minister of Commerce Bo Xilai and from Vice-Premier Wu Yi, who is responsible for health issues as well as matters of trade and commerce, would encourage businesses to implement education programs and establish HIV prevention policies as well as policies to address the stigma associated with infection.

While a national-level response and high-level commitment are crucial to containing epidemics, implementation at local levels throughout China will be vital to ensuring the country's long-term health and economic growth and stability.

Conclusion

China has made significant advances in addressing HIV/AIDS, but considerable challenges remain. With low national prevalence and concentrated epidemics in several key populations, implementing targeted and effective prevention measures is one of the most critical tasks. China's success in preventing a generalized HIV/AIDS epidemic hinges on its ability to test, counsel, and treat intravenous drug users, sex workers, men who have sex with men, and members of other marginalized groups.

To this end, there have been several encouraging developments. The country's leadership has mobilized its bureaucracy, committed new resources, and enacted new laws and policies that aim to improve the environment for HIV/AIDS prevention and treatment. Highlights of the country's progress include high-profile prevention efforts, legal reforms that affect rural-to-urban migrants and that open the way for harm-reduction strategies, and the rollout and expansion of free antiretroviral drug programs in central China.

However, translating best practices and successful pilot projects into larger, regional, and national programs is a slow and painstaking process that requires significant investment in human and capital resources. While there is great interest in scaling up small programs, few examples of expansion currently exist. Raising the required funds and addressing the tensions that exist between public health and security sectors over the need to crack down on illegal activities such as drug use and commercial sex will be also crucial to the ultimate success of HIV/AIDS programs in China.

And while new national policy directives and local laws do aim to hold government officials responsible for implementing HIV/AIDS programs, the level of support likely to come from officials from all ministries remains uncertain. Mobilizing a broad spectrum of government departments, as well as the private sector and NGOs, would ensure the ultimate success of China's efforts to prevent and control the spread of HIV/AIDS.

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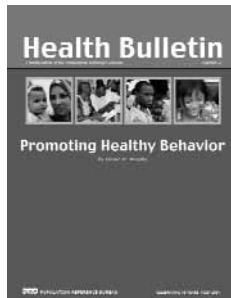
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CHINA Confronts HIV/AIDS

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China has made significant advances in confronting HIV/AIDS, but considerable challenges remain. While overall national prevalence remains low, the epidemic is expanding from specific regions and at-risk groups to the general population. China's success in preventing a generalized HIV/AIDS epidemic hinges on the country's ability to test, counsel, and treat members of socially marginalized populations. This report examines the implications of the epidemic's current trends on future Chinese policy.