

Patently absurd. Not invoking compulsory licenses is deadly, says Pedro Chequer.

duction capacity of its old plant on the other side of the city. Company Director Eduardo Costa has ambitions beyond just manufacturing more antiretroviral drugs. He says Brazil needs to start producing the active pharmaceutical ingredients used to make the drugs, which it



now purchases from India and China. Costa says these are often of inferior quality, so by making its own, Farmanguinhos can both reduce costs and avoid expensive delays in production.

But even with these changes, making the new generation of antiretroviral drugs will be challenging for Brazil. "It's a lie that if we had no patents, we just can from right today produce generic medicines for all drugs," says epidemiologist Francisco Basto, a leading AIDS researcher at Fiocruz. "This

will be a very, very complicated issue for the coming few years."

Costa agrees but says Farmanguinhos and other drugmakers must rise to the occasion, for the sake of Brazil and other cash-strapped countries. As Costa walks around the plant's new high-tech machines—several of which are still wrapped in plastic—he notes that representatives from two dozen countries have toured the facility in hope of following in the Brazilian government's footsteps. "People of the world want us to be much better than we are," says Costa. "We have to answer to this demand."

—JON COHEN

ARGENTINA

Up in Smoke: Epidemic Changes Course

Over the past few years, HIV infections of heterosexuals have eclipsed those of injecting drug users and gay men

BUENOS AIRES, ARGENTINA—Stella Maris Todaro is part of a battalion of *promotorios* hired by the government to educate their communities about HIV/AIDS. "I started this work 15 years ago because I saw my children were addicted, shooting drugs," says Maris, who lives in a poor neighborhood called a *villa miseria*. Whereas most countries in Latin America then had AIDS epidemics concentrated in homosexual men, Argentina, like its neighbors in the Southern Cone of South America, had an equally large problem in injecting drug users (IDUs) who shot

cocaine. As it turned out, Maris's two sons both became infected by sharing syringes and died from AIDS. Although she was not an IDU herself, a sometime partner was, and in 1995, Maris learned that she, too, was HIV-positive.

Today, Maris, 52 and a grandmother, better characterizes the average HIV-infected person in Argentina than do her sons. In a dramatic shift seen across the Southern Cone, IDUs largely have either died from AIDS or stopped injecting cocaine and switched to smoking the much cheaper *pasta base de cocaine*, or *paco*,

a low-grade paste. "We have a great change of the use of drugs in Argentina," says epidemiologist Claudio Bloch, head of the HIV/AIDS program for the city of Buenos Aires. Bloch, like many other experts, contends that *paco*'s rise in popularity is a result of "the crisis," the sharp devaluation of the peso that occurred in 2001 and 2002, although the same shift has occurred in other Southern Cone countries that did not suffer an economic collapse.

By December 2005, HIV had infected 130,000 people in Argentina, or 0.6% of all adults, a percentage that has remained steady for several years. Ministry of Health figures from 2004 show that 50.7% of the people with AIDS had been infected through heterosexual sex, whereas men who have sex with men (MSM) accounted for only 18%, and IDUs were at 16.6%. A similar analysis from 1982 to 2001 shows that 40.1% of the AIDS cases were IDUs—more than either MSM or heterosexuals. In Buenos Aires, the evidence is more telling still: IDUs accounted for only 5.2% of the new infections between 2003 and 2005. Now, says Bloch, the new infection rate in men and women is almost the same. "The heterosexualization of the epidemic is so strong," he says.

As more women become infected, Maris's services become increasingly valued. "I've learned a lot of things from Stella," says Sara Tapia, 33, a mother of four who also works as a *promotorio*, lives in a *villa miseria*, and is HIV-positive. "In life, we have to be what we are. We mustn't pretend. We're always going to be that." One of Tapia's most difficult challenges, she says, is that her husband refuses to get tested: "It's not something he



Cold truth. HIV/AIDS in Argentina is increasingly a disease of poor women such as Sara Tapia (left), a mother of four who lives in this *villa miseria*.

wants to talk about, and it's obviously painful for him, so we don't dwell on it."

Great expectations

Argentina was one of the first countries in Latin America to offer antiretroviral drugs to everyone in need, but it has not received the worldwide praise that's been poured onto neighboring Brazil for making a similar commitment. "People talk about Brazil because the Brazilians have done a very good job of marketing what a very good job they've done," says Pedro Cahn, a leading AIDS researcher in Buenos Aires who heads the Fundación Huesped and is chief of infectious diseases at Hospital Juan Fernández. But he also stresses that Brazil has a "more consistent" national program in many ways.

Both of Maris's boys became sick before potent cocktails of anti-HIV drugs had come to market, but she was luckier. Today, the virus is not detectable in her blood, and her immune system is robust. Tapia similarly is doing well on a cocktail of drugs.

Some 30,000 infected people in Argentina are currently receiving treatment, which the government says is 100% of those with advanced disease. Mother-to-child transmission, which anti-HIV drugs can prevent, has dropped to 3%. "It's similar to Paris," notes Bloch.

Yet many AIDS researchers and patients complain that the government program has many shortcomings compared to wealthy countries. That is a central dilemma for Argentina, which long has seen itself as the most European country in Latin America, yet frequently—especially since the crisis—finds itself with rich-country expectations but poor-country limitations.

One of the biggest problems is that government clinics and hospitals are short staffed. "You have to wait for everything," says Roxana González Montaner, a clinician who works in a poor part of the city. She notes that there are long lines every morning, and that many doctors here work in both public and private practice to make ends meet. Lab tests require more long waits, and the results often do not arrive back at clinics for weeks or even months. "We can make many things happen for [some people] but not for everyone," says González.

Pharmacies all too frequently run out of anti-HIV drugs. "This morning, we didn't have abacavir at my hospital," says Cahn, referring to an increasingly popular drug for people starting treatment. "Ask me why, we don't know."



Drug drop. Claudio Bloch's group has documented a steep decline in HIV spread via shared needles.

Carlos Zala, an AIDS clinician and researcher at Hospital Juan Fernández, says the government needs to spend more money on monitoring treatment. "HIV [care] is much more than just providing antiretroviral drugs," says Zala, noting that it's often difficult for people to learn their

immune status or the levels of HIV in their blood. He also faults the government for not monitoring the treatment program itself, which his team is now starting to do by carefully following a cohort of treated people to gauge the emergence of drug resistance and health problems. "This is typically Argentina: a good thing, a good action, that no one is controlling," says Zala. "We will provide medication, but no one will see whether it works."

—JON COHEN

PERU

A New Nexus for HIV/AIDS Research

Talented investigators and explosive spread in men who have sex with men have made this country a hot spot for clinical studies

LIMA, IQUITOS, AND NAUTA, PERU—On a Friday night this June at a gay disco in Iquitos, a jungle city that's the jump-off point for touring the Amazon rainforest, drag queens danced to the thump of "*Voulez-vous coucher avec moi?*" in a Miss Adonis contest. The event, staged by the Asociación Civil Selva Amazónica, was part entertainment, part HIV prevention, and part recruitment for an AIDS vaccine trial.

Welcome to Peru, a somewhat incongruous hotbed of HIV/AIDS research. "Everyone's going to Peru, and it's not because they have a huge epidemic," says Robert Grant, a virologist at the University of California, San Francisco (UCSF), who runs one of many collaborative projects now under way. "It's because of the research climate."

Intensive efforts are now under way to understand the country's perplexing epidemi-



Recruiting station. "Lashmi" leads a teach-in about drag queens that doubles as an attempt to find volunteers for an AIDS vaccine trial.