BY KATIE CHARLES

No truce in the AIDS war

Treatments have improved and new drugs are in the works, but awareness and prevention remain vital

▶ The specialist: Dr. Michael Mullen

Currently the clinical director of infectious diseases at Mount Sinai, Mullen has been helping treat AIDS since the beginning of the crisis in the early '80s. It was watching many of his friends and colleagues battle AIDS that inspired Mullen to become a doctor.

▶ The big story:

Last week, both the AIDS Healthcare Foundation and Global AIDS Alliance called upon President-elect Barack Obama, a longtime supporter of AIDS awareness, to make fighting the disease a priority during his administration.

▶ Who's at risk:

HIV, the human immunodeficiency virus, attacks the immune system. "In most patients, HIV will lead to AIDS," says Mullen.

HIV can be transmitted through blood and the fluids exchanged in sexual contact. It can also pass from mother to child in childbirth, gestation and breast-feeding.

"Sexual contact is the No. 1 way Americans contract HIV," says Mullen, "followed by IV drug use."

Thousands of people were infected through contaminated blood transfusions, but the vast majority of those infections occurred before 1985, when blood donations started being screened for HIV. The virus can also pose an occupational hazard for health-care professionals and other workers who handle blood or needles on the job.

The U.S. Centers for Disease Control recommend that everyone between the ages of 13 and 64 be tested for HIV. "The person who is HIV-positive and has no idea could be spreading it," says Mullen.

HIV screening is especially important for gay men, IV drug users and their partners, anyone with a sexually transmitted disease, anyone with tuberculosis, all pregnant women, and people starting a sexual relationship. Gay men are the group at highest risk of contracting HIV in the U.S., but straight men and women should take precautions, too. "In people of color, the number of HIV cases is rising in the heterosexual population," says Mullen. "That's particularly true in the African-American population."

Even though AIDS awareness is widespread, Mullen is still seeing more new cases in young people, especially gay men. "If you think about it, young people are more sexually active, they have more partners, and they tend not to be as careful as someone who is older," says Mullen. "Younger people have also seen that you can be HIV-infected and live a normal life with medi-

▶ What you can do:

Get an HIV test.

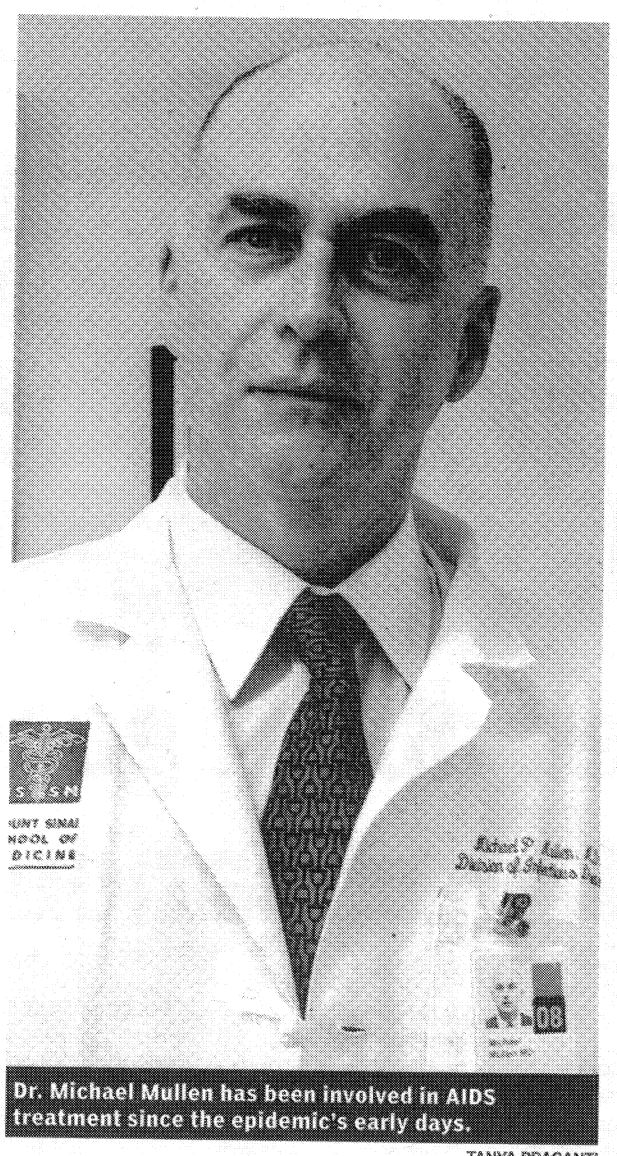
If you are in a high-risk category, you should be tested yearly or after any unsafe exposure. Keep in mind that it takes about three months for the body to start making the antibodies detected by some tests.

Don't test yourself.

It's more convenient to buy a self-test kit in the pharmacy, but those tests are more likely to miss some HIV cases or bring back false positives. "Your best idea is to seek medical attention," says Mullen.

Get tested for all STDs.

Many people aren't aware that having any STD puts you at higher risk of HIV establishing itself in your body if you're exposed. Ask your doctor to run an across-the-board STD test along with the HIV test.



Dr. Michael Mullen has been involved in AIDS treatment since the epidemic's early days.

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cation. They don't have the same fear that the older generation had."

▶ Signs and symptoms:

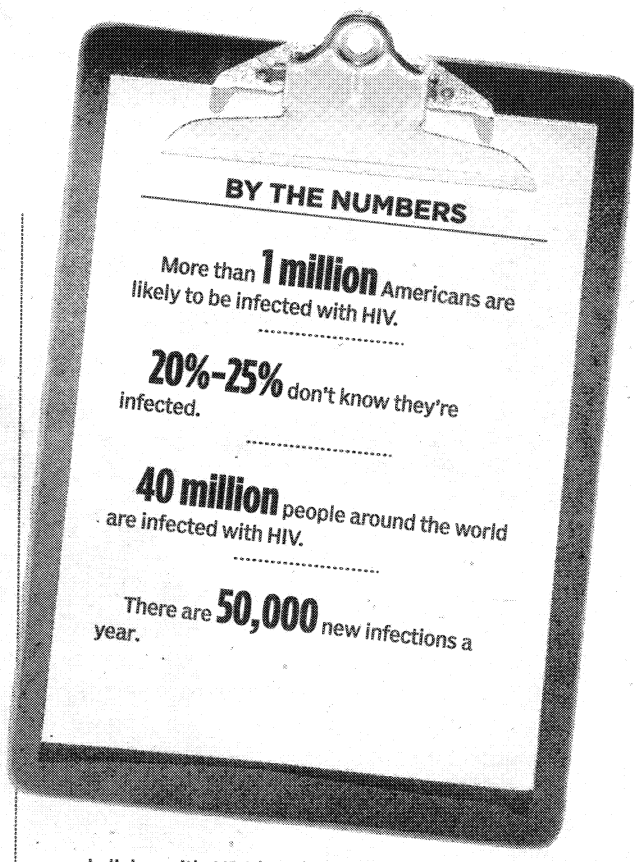
For most people, HIV remains an invisible infection for years. "Most people go eight to 10 years without anything. And then they will start having some problems: shingles, tuberculosis, thrush, neurological stuff like numbness in the legs or pain in the extremities," says Mullen.

While most people don't have symptoms early on, says Mullen, "about 20%-40% of patients develop acute retroviral syndrome, usually within the first few weeks of infection." The symptoms often look like a bad case of the flu or mono: sore throat, ulcers in the mouth, rash, fever, muscle aches and weight loss. "Then people get better," says Mullen. Many aren't found to be infected with HIV until much later. Other early signs include swollen lymph nodes that don't go away, white spots in the mouth, and white lesions on the side of the tongue.

"People can go for many, many years without any evidence that their immune system is fighting HIV," says Mullen, "You may not know that anything is going on. That's why early testing is so important."

▶ Traditional treatment:

Improved antiretroviral drugs have made HIV a manageable disease. "The good news is that the number of deaths of



people living with AIDS has decreased drastically," says Mullen. "It's not a death sentence anymore. It's chronic." The new antiretroviral drugs interfere with the various steps in the life cycle of the virus. HIV infects CD4 cells — white blood cells that are essential to the body's immune system — and then starts replicating; antiretrovirals interfere with different parts of the process.

"We used to give one drug, AZT," says Mullen, "but the virus figured out how to get around that very quickly." The new drugs zero in on different targets. "Everyone should be on three agents that inhibit the three steps in the life cycle."

A normal CD4 count is usually more than 1,000, with the healthy range sometimes stretching from 400 to 2,000. The CDC recently released guidelines recommending that all HIV-positive patients with CD4 counts under 350 be considered for antiretroviral therapy, along with all patients who are symptomatic.

▶ Research breakthroughs:

Many of the most promising advances in HIV and AIDS treatment are in drug development. "In the last two years, we've had more agents approved than ever before, including agents that work on the different steps of the virus' life cycle," says Mullen. "So people whose virus had mutated and become drug-resistant are getting a second chance." The improved drugs are allowing doctors to fight the HIV virus on two fronts: through a virological response that makes the virus undetectable in the blood, and through an immunological response that raises the level of white blood cells called T cells, improving the host's ability to fight off disease.

"At Mount Sinai we're currently looking at a new integrase inhibitor and also the role of Vitamin D in patients with HIV infections," says Mullen. Scientists are also looking at microbicides, topical agents used to prevent the virus from establishing itself in the host during the sexual encounter. The research is promising but preliminary. "Microbicides haven't worked yet," says Mullen.