

## **HIV SEROSURVEILLANCE ACTIVITIES**

HIV serosurveillance data assess the current prevalence, distribution and trends of HIV infection in New York State. Since 1987, blinded HIV seroprevalence studies have been conducted to estimate the prevalence of HIV in six selected populations, using leftover blood specimens collected for other purposes.

Dried blood specimens are collected from every infant born in New York State and screened by Department of Health for inherited metabolic disorders. Since 1988, 1,736,247 specimens from the newborn study have been blindly tested for HIV antibody after all identifying information was removed. The newborn HIV study estimates the HIV prevalence rate among women giving birth. The HIV prevalence among women in this population-based newborn study is mainly a reflection of the IDU and heterosexual HIV epidemic since most women are infected through these two routes of exposure. In addition to the newborn HIV study, more than 150,000 specimens of leftover serum from clinic populations have been blindly tested for HIV after all identifying information was removed. Several of these clinic-based studies are targeted to specific high-risk populations.

As demonstrated by AIDS surveillance data, New York City is the epicenter of the HIV epidemic with HIV prevalence substantially higher than the rest of the state. The HIV prevalence among New York City women included in the newborn study was 1.2 percent compared to 0.2 percent for the rest of the state. HIV prevalence rates for methadone maintenance treatment program (MMTP) patients and sexually transmitted disease (STD) clinic patients are also higher in New York City compared to the rest of the state.

**HIV Seroprevalence Among All Groups Tested  
in Blind Seroprevalence Studies  
by Sex by Region  
New York State, Through December 1993**

	New York City			Rest of State		
	# Pos	# Tested	% Pos	# Pos	# Tested	% Pos
Newborn Study	9170	783,986	1.2	1,630	921,882	0.2
Homeless Pregnant Women@	38	356	10.7	--	--	--
STD Clients*						
Male	3,293	37,548	8.8	469	25,269	1.9
Female	1,172	19,238	6.1	119	11,513	1.0
Drug-Free Treatment Clients**						
Male	101	2,151	4.7	162	2,245	7.2
Female	63	842	7.5	54	878	6.2
Methadone Treatment Clients***						
Male	3,188	9,312	34.2	154	794	19.4
Female	1,314	4,417	29.8	63	387	16.3
Adolescents†						
Male	5	356	1.4	--	--	--
Female	9	1,153	0.8	--	--	--
Homeless Youth‡						
Male	174	3,404	5.1	--	--	--
Female	86	2,995	2.9	--	--	--

@ 1/92-12/93 Mobile Clinic serving 2 homeless shelters.

\* '88-'93

\*\* NYC 11/90-12/93\UPS 6/90-12/93.

\*\*\* NYC 6/88-12/93\UPS 2/89-12/92.

† 5/93-12/93.

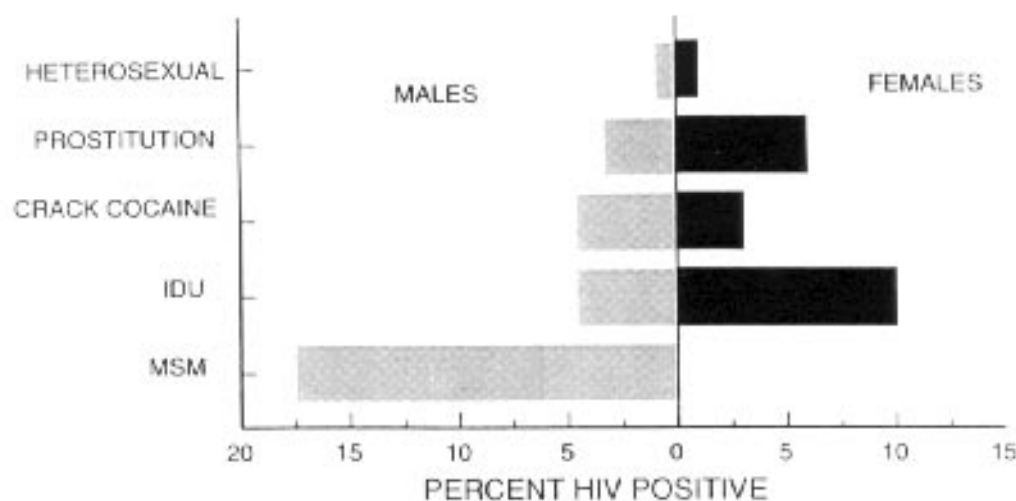
‡ 9/87-11/93.

The lowest HIV prevalence is found in the population-based newborn study. The HIV prevalence found in the clinic-based studies that target high-risk populations are much higher. In New York City, STD patients, drug-free treatment patients and homeless pregnant women have an HIV prevalence rate five to eight times higher than that found in the newborn study. The highest HIV prevalence in New York City is found among MMTP patients who have an HIV prevalence more than 25 times higher than that found among women in the newborn study. The rest of the state has a pattern similar to that seen in New York City. However, the magnitude of difference between drug treatment patients and women in the newborn study was much greater, with drug-free treatment patients having an HIV prevalence rate 25 times greater, and MMTP patients having a rate nearly 90 times greater.

Even within a targeted high-risk group such as STD clinic patients, the HIV prevalence increases dramatically with additional specific risk behaviors. Data are presented from three upstate STD clinics. The HIV prevalence among individuals whose only HIV-related risk behavior is heterosexual contact is 0.88 percent for men and 1.03 percent for women. The HIV prevalence is two to three times higher for cocaine/crack users, three to five times higher for prostitutes and four to nine times higher for injecting drug users.

### HIV Prevalence in Three Upstate New York STD Clinics by Risk Behavior

1988-1993



MSM=Men who have sex with men.  
Prostitution=exchanged drugs or money for sex.  
Note: Risk categories are not mutually exclusive.

Minority women in the newborn study have higher HIV prevalence than white women in both New York City and the rest of the state. The trends in HIV prevalence among New York City women in the newborn study appear to be decreasing slightly for Hispanic and white women, but are remaining stable for black women. In New York State excluding New York City, however, there appears to be a decline in the overall HIV prevalence among Hispanic women and no change among black and white women.

In recent years, HIV prevalence has been increasing in urbanized areas outside of New York City. The first three years of the newborn study indicated that the highest HIV prevalence was found in New York City followed by counties surrounding New York City, the Hudson Valley region upstate urban areas, and upstate rural areas. Following is a state map of counties showing HIV prevalence for 1992 and 1993. The three New York City boroughs, Manhattan, Bronx and Brooklyn have the highest prevalence in the state which exceeds 1 percent, twice that of the counties in the second highest category on the map. The second highest category includes several upstate urban counties. HIV prevalence in Sullivan, Schenectady and Albany counties is now similar to that found in Queens, Richmond and Westchester.

