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Drug Use and HIV Risks among Migrant Workers on the DelMarVa Peninsula.

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Drug Use and HIV Risks among Migrant Workers on the DelMarVa Peninsula

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ABSTRACT

Because high rates of drug use have been documented in the migrant farm worker population, the National Institute on Drug Abuse funded the Migrant Health Study to examine HIV risk behaviors among drug-using farm workers and their sexual partners. Many of these individuals were home-based in South Florida and migrated during the work season to various points along the Eastern Migratory Stream. The focus of this paper is a description of the characteristics and behaviors of the 151 respondents contacted on the DelMarVa Peninsula during 1994 and 1995. The data indicate that drug use was widespread in this population, a significant proportion were at risk for HIV infection, and 6% were HIV positive. As a result of these findings, public health agencies on the peninsula have instituted HIV education programs in those clinics utilized by both local and transient agricultural workers. [Translations are provided in the International Abstracts Section of this issue.]

Key words. Migrants; HIV; Crack; Injection; AIDS

INTRODUCTION

From as far away as Mexico and Haiti, crowded into run-down pickup trucks and dilapidated vans, migrant workers travel from place to place across America harvesting fruits, vegetables, and a seasonal income. The US Department of Labor defines the nation's 2.2 million *migrant farm workers* as agricultural laborers who received at least half their income in the past 12 months working away from home. According to the National Agricultural Workers survey, 42% of all farm workers are migrants (Potok, 1996), and as indicated in Fig. 1, migrants account for more than half of all farm workers in the Northeast, Southeast, and Northwest.

Major concentrations of seasonal farm workers travel along the Eastern Migratory Stream (see Fig. 2). The stream begins during the late fall and winter in South Florida with the harvesting of vegetables and citrus fruits. Migrant laborers then move north—to Georgia in spring and summer for onions and peaches, and then to either Ohio and Michigan for summer fruits and vegetables, or to the Carolinas, the DelMarVa peninsula, and New York in the late summer and early fall for tobacco, potatoes, and apples.

The migrants' hard work and transient lifestyle would appear to reflect a special endurance. However, the impoverished living quarters, outhouses, and inadequate sanitary facilities in migrant camps tend to facilitate the spread of ill-health and both bacterial and viral diseases. A variety of studies have documented high levels of such infectious diseases as dysentery, hepatitis B, typhoid fever, tuberculosis, and a host of other respiratory and intestinal ailments (Gonzalez, 1985; Rust, 1990). And in many camps, the potential for HIV acquisition and transmission is always present as a result of drug use, prostitution, and other sexual risk behaviors.

Prior to the early 1990s, few HIV/AIDS prevention/intervention efforts were targeting migrant laborers, and it was for this reason that a program known as the "Collier County Migrant Health Study" was initiated. It was among the first to examine HIV risk behaviors among drug-using migrant workers and their sexual partners, and it presented a unique opportunity to monitor a mobile population and assess the nature and extent of its drug use, high risk behaviors, and HIV seroprevalence. Many of the workers were home-based in South Florida and migrated during the work season to various points along the Eastern Migratory Stream.

The Collier County Migrant Health Study was part of NIDA's overall Cooperative Agreement for AIDS Community-Based Outreach/Intervention Research Initiative, which included 23 sites ranging from Anchorage to Miami and from Puerto Rico to Brazil (see Fig. 3). The overall NIDA cooperative agreement initiative began in 1990 with the purposes of: 1) preventing the further spread of

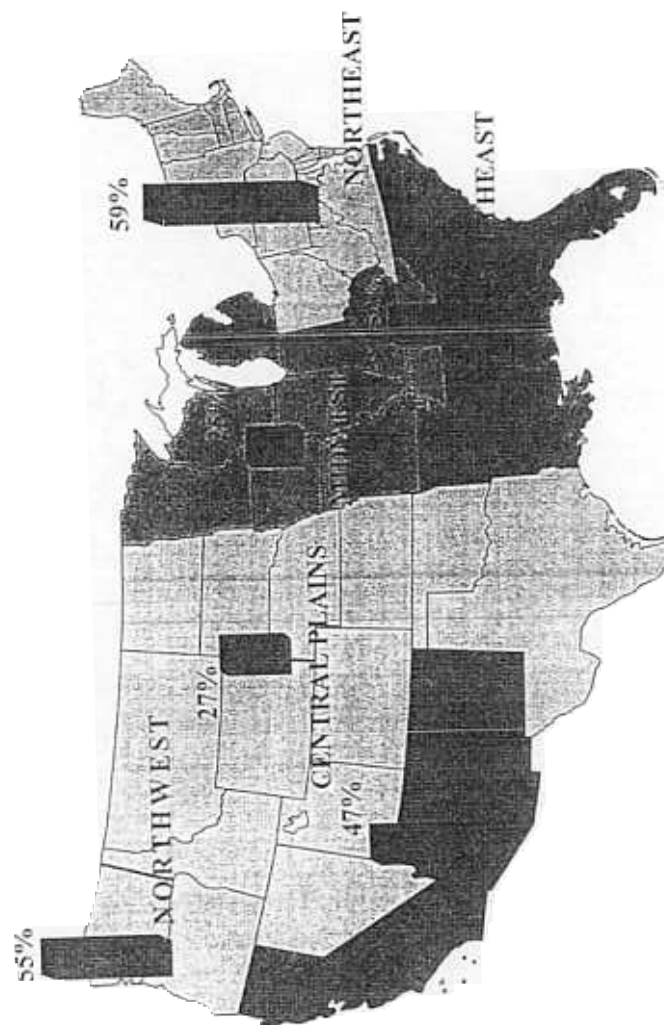


Fig. 1. USA's migrant-labor force.

tration of a standardized "Risk Behavior Assessment" (RBA) instrument, and a locator form. Pretest HIV prevention counseling was provided covering such topics as HIV disease, transmission routes, and risky drug-using and sexual behaviors. HIV testing was provided to all clients on a voluntary basis, and posttest counseling and HIV test results were provided 1 to 3 weeks after testing. An effort was made to reassess all participants at follow-up with a standardized Risk Behavior Follow-up Assessment (RBFA) instrument.

Within the context of these introductory remarks, this paper focuses on the prevention/intervention effort on that segment of the Migrant Health Study which took place on the DelMarVa peninsula, a 5,000 square mile area composed of segments of Delaware, Maryland, and Virginia—hence the name "DelMarVa" (see Fig. 4). Often referred to by locals as the "Eastern Shore," it is primarily rural and sparsely populated, and bounded by Delaware Bay, the Chesapeake Bay, and the Atlantic Ocean. The major industries are chemicals, fishing, beach resorts, poultry, and agriculture, with the latter including fruit, vegetable, and grain crops. It is estimated that between 6,000 and 10,000 migrant farm workers visit the DelMarVa peninsula each year.

METHODS

The DelMarVa site was a seasonal field station that operated from June through September 1994 and from July through October 1995. Kent and Sussex Counties in southern Delaware were originally selected for client sampling and recruitment, but late in the first year of the project the target area was expanded to include Kent and Dorchester counties in eastern Maryland. Migrant camps were identified by project staff through a combination of field outreach and contacts with local health departments and the DelMarVa Rural Ministries of Salisbury, Maryland. Many of the camps were composed of barracks and farmhouses converted for migrant occupancy, but those selected for outreach were typically mobile home parks with rental trailers and seasonally occupied motels that were used for migrant housing. Project staff were DelMarVa residents already working full-time in public health, drug, and/or HIV counseling, and outreach positions who were willing to devote evenings and weekends to the prevention/intervention effort.

To be eligible for the project, clients had to be current drug users (use in the last 30 days) who were not in treatment and who lived in the target area. They had to be at least 18 years of age and not intoxicated or mentally impaired at the time of interview. Drug use was verified by an on-site urine test. Recruitment began with migrants already known to project staff through their daytime jobs as counselors and public health workers. Each eligible participant was then asked

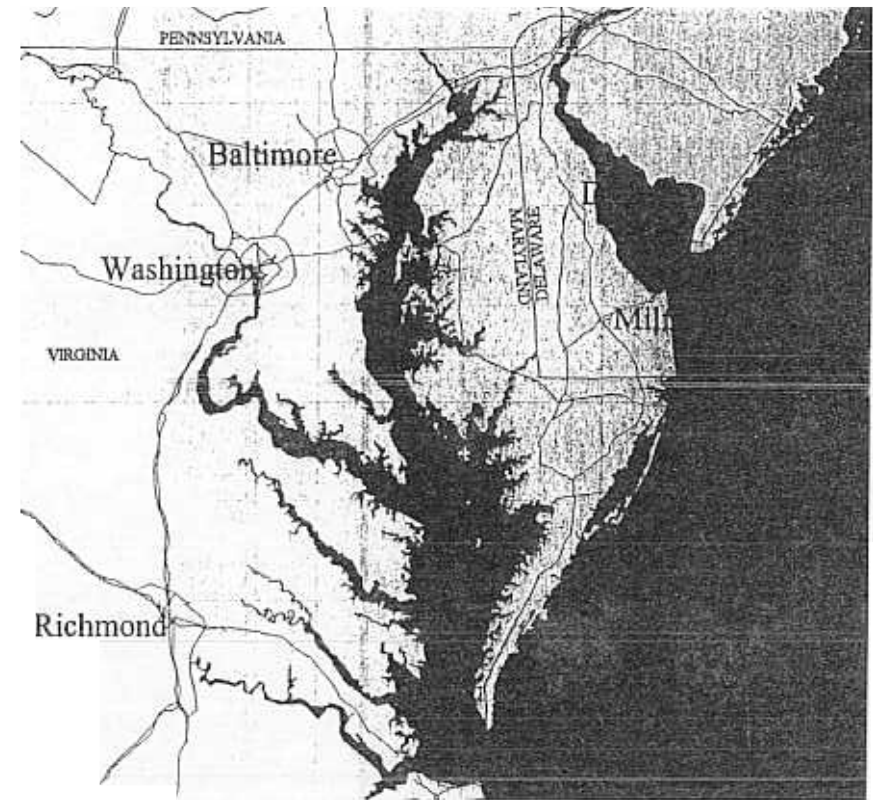


Fig. 4. DelMarVa peninsula.

to recruit other drug users from their camps and networks. After eligibility was established, these "client recruiters" were paid a \$5.00 stipend for each referral. Almost half of the DelMarVa clients were recruited in this manner, with the balance solicited through staff outreach or word-of-mouth contacts. Finally, all clients—regardless of the manner of recruitment—were paid a monetary stipend for participation in the project.

Clients were told by outreach workers that they could participate in a public health project designed to reduce HIV risks. It was also emphasized that they would get a free AIDS test, and free condoms, needle cleaning materials, and referrals to drug user treatment and health care agencies if they wished them. There were virtually no refusals.

RESULTS

During the two seasonal periods that the project operated on the DelMarVa peninsula, a total of 151 eligible clients were recruited. As indicated in Table 1, they had a median age of 35 years, and the overwhelming majority were men. Not surprisingly, more than half had less than a high school education, almost all were either Black or Hispanic, and since most had migrated from their homes in Mexico, Florida, Texas, and the Caribbean, few were homeless.

As indicated in Fig. 5, drug use was widespread in this population of migrant workers. Almost all had histories of alcohol and marijuana use, and the majority had histories of crack and/or other cocaine use. Their drug-using careers typically had begun with alcohol at a median age of 16 years, followed by marijuana at age 17, heroin at age 19 (for the few who used it), cocaine at age 22, and crack at age 28.* Moreover, virtually all were *current* users of alcohol, almost half were *current* marijuana users, and some 60% were current users of crack.† Interestingly, however, few were users of heroin—either currently or historically.

The data in Table 2 suggest that a significant proportion of these 151 migrant workers were at risk for HIV infection. While only 9.9% had a history of injection drug use, just over a third had had one or more sexually transmitted diseases, and almost 40% reported having traded sex for money and/or drugs. In terms of current risk factors, most notable was the fact that 15.2% had multiple sex partners and 37.1% had engaged in unprotected vaginal sex.

Of the 151 migrants, only 6 (4%) were found to be positive for HIV infection. None of these six migrant workers was a current injector, and only 1 had a prior history of drug injection. The following profiles, however, suggest that for most of these clients their HIV infections were more related to sexual risk than drug use. For example:

- Client #1—A 39-year-old Black female crack user; never injected drugs or traded sex for money/drugs; in the last 30 days had only one sex partner, vaginal sex only.
- Client #2—A 29-year-old Hispanic, bisexual male crack user and former injector; sexually abstinent in the last 30 days, but reported trading sex for money/drugs in the past.
- Client #3—A 36-year-old Hispanic, bisexual male crack user; never injected drugs; sexually abstinent in the last 30 days, but reported trading sex for money/drugs in the past.

*This late onset of the use of crack-cocaine in this population was likely a function of the respondents' age at the time the crack epidemic started in the United States. That is, the use of crack became widespread in the United States in the mid-1980s (see Chitwood et al., 1996), and the median age of the migrant workers in this sample at that time was about 28 years.

†"Current" use refers to any use in the 30-day period prior to interview.

Table 1.
Selected Demographic
Characteristics of 151 Migrant
Workers on the DelMarVa
Peninsula

Age:	
18-24	12.6%
25-34	37.1%
35-49	43.7%
50+	6.6%
Median	35.0%
Gender:	
Male	84.8%
Female	15.2%
Race/ethnicity:	
Black	69.5%
White	6.0%
Hispanic	22.5%
Other	2.0%
Education:	
Less than HS	52.3%
HS graduate	33.1%
More than HS	14.6%
Homeless:	
Yes	17.2%
No	82.8%

Client #4—A 44-year-old Hispanic male heroin snorter; never injected drugs or traded sex for money/drugs; sexually abstinent in the last 30 days.

Client #5—A 27-year-old Hispanic male alcohol and marijuana user; never injected drugs or traded sex for money/drugs.

Client #6—A 34-year-old Black male crack user; never injected drugs; sexually abstinent in the last 30 days, but reported trading sex for money/drugs in the past.

DISCUSSION

The DelMarVa study data, when compared to that of the wider Delaware area, present some interesting contrasts. Compared to the two groups at highest risk for HIV—men who have sex with men and injection drug users—this cohort of 151 migrant workers would appear to be a relatively low-risk population in terms of HIV acquisition and transmission. As for their involvement with illegal drugs, slightly less than 10% ($N = 15$) had histories of injection drug use,

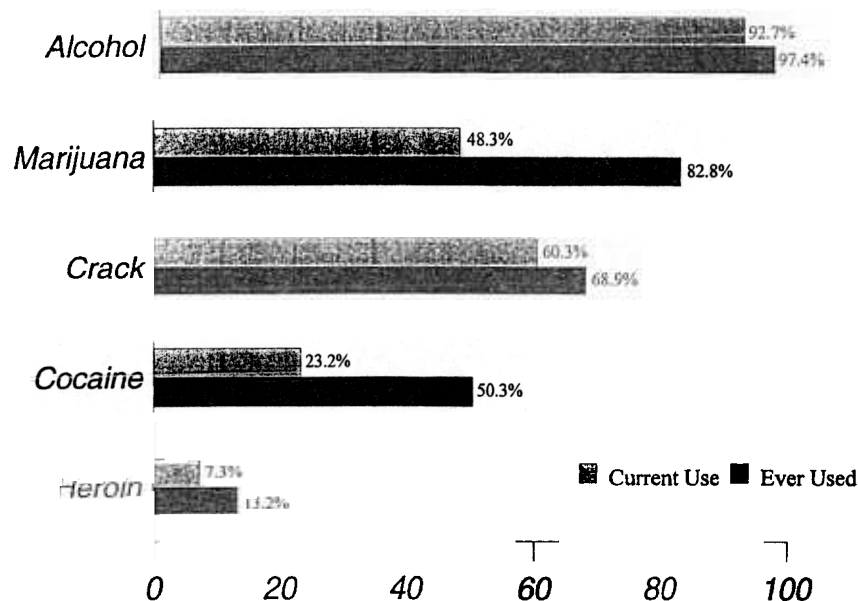


Fig. 5. Drug use patterns among 151 migrant workers on the DelMarVa peninsula.

and less than 1% ($N = 1$) were current injectors. With regard to sexual risks, although almost 40% ($N = 59$) had histories of sex trading, only 15.2% ($N = 23$) had had multiple sex partners in the last 30 days and 4.6% ($N = 7$) had had sex with an injection drug user. Furthermore, 36.4% ($N = 55$) had only one sex partner in the last 30 days, and 48.3% ($N = 73$) had been sexually abstinent during this period. And finally, as indicated earlier, 4% ($N = 6$) of the project clients were found to be HIV positive.

These numbers stand in sharp contrast to AIDS data for Delaware, a state which accounts for much of the DelMarVa peninsula. As of June 1996, for example, Delaware had a cumulative total of 1,660 cases of AIDS reported to the Centers for Disease Control and Prevention since the beginning of the epidemic (CDC, 1996). This is a relatively small number in absolute terms, but somewhat large when one considers that the Delaware population is well under one million persons. Moreover, in terms of newly reported cases, Delaware ranks seventh in the nation with a rate of 44.6 cases per 100,000 population. The only jurisdictions to exceed this rate for the period July 1995 through June 1996 were the District of Columbia (188.5), New York (73.1), New Jersey (50.3), Florida

Table 2.
Prevalence of HIV Risk Factors among 151 Migrant Workers on the DelMarVa Peninsula

		N)
Current factors:		
Injecton drug use	0.7	($n = 1$)
Drug use before sex	40.4	($n = 61$)
Sex with an IDU	4.6	($n = 7$)
Multiple sex partners	15.2	($n = 23$)
Unprotected vaginal sex	37.1	($n = 56$)
Lifetime factors:		
Sex trading	39.1	($n = 59$)
STD history	35.1	($n = 53$)
Injection drug use	9.9	($n = 15$)

(54.6), Connecticut (46.8), and Maryland (45.5). And interestingly, some 51% of Delaware's new cases of AIDS occurred among injection drug users (Delaware Health and Social Services, 1996). This proportion is considerably higher than that of diagnosed AIDS cases among injection drug users across the United States (25%).

Although Delaware is a high AIDS incidence state and this migrant group would appear to have a relatively low prevalence of HIV infection, it is unlikely that high HIV risk populations in Delaware will have a significant impact on the migrant community. Of Delaware's cumulative 1,660 AIDS cases, 79.6% were from Wilmington, a city in the northern-most part of the state and far removed from the rural areas in which the migrant workers are concentrated. And it is in Wilmington where most of the state's injection drug users are concentrated. Furthermore, many of the remaining cases have occurred on the Delaware shore—the beach resorts of Rehobeth and Bethany—among men who have sex with men. Ethnographic interviews conducted during the course of the study suggested that contacts between the migrant workers and the networks of injection drug users and prostitutes in the northern part of the state, and with men who have sex with men in the beach resorts, were virtually nonexistent. Moreover, of the six HIV positive migrants in the sample examined in this paper, none reported sharing injection equipment while “on the road,” none reported having sex with paid or casual partners in the last 30 days, and only one reported having sex with a “townsperson” in the last year. This is not to suggest, however, that HIV acquisition or transmission involving DelMarVa migrant laborers is either impossible or unlikely. A 4% HIV infection rate among a migrant population indicates that transmission of the virus must be considered a problem for that community, and as such, public health agencies on the peninsula have instituted HIV education

programs in those clinics utilized by both local and transient agricultural workers.

As a final point, the data in this study have a number of limitations which serve to restrict the generalizability of the findings. Given the small sample size, it would be tenuous to suggest that the general characteristics, drug-use patterns, HIV infection rates, and AIDS risk behaviors of this population are analogous to those of other work groups found along the Eastern Migratory Stream. Moreover, since client recruitment was limited to those migrant camps that were willing to give access to project outreach workers, it is plausible that generalizability even to the DelMarVa peninsula is not possible. Given this limitation, it is not unlikely that rates of prostitution, sex-for-drugs exchanges, and HIV seroprevalence, as well as frequency of sexual contacts and drug/equipment sharing with local residents might be lower, or *perhaps much higher* elsewhere, than is the case in this population. As such, the risk for infection might be considerably greater at other points along the Stream.

Clearly, this would suggest the need for additional research along the Eastern Migratory Stream in an effort to better understand and document both treatment and risk reduction needs. Although farm workers and other migrant laborers traditionally have not been the targets of either qualitative or quantitative studies of this type, they are nevertheless accessible and represent viable populations for further study. This is especially important with respect to HIV research. Since migrant workers, by definition, are members of highly mobile populations, they may be moving from low to high HIV prevalence areas, or from high to low prevalence areas. This has implications for both mobile and resident populations with regard to their position along the continuum of HIV risk.

Going further, the findings of this study have policy implications for human services delivery systems in rural communities. Migrant farm workers represent a population in which significant numbers place themselves at risk for HIV acquisition and transmission. Moreover, hygienic conditions and facilities are severely compromised in many of the camps. This situation poses two contrasting implications. On the one hand, local health care agencies and ministries should be aware that large and highly mobile at-risk populations become temporary residents in their catchment areas with the potential for placing great demands on their services. At the same time, in many rural areas migrant workers do not have access to needed health care. As such, local agencies must consider the need for health care outreach programs targeting migrant laborers.

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Behavior Changes among Crack-Using Rural and Urban Women

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ABSTRACT

This study compared rural and urban crack-using women and examined their responses to two interventions. A prospective cohort study design was employed to assess the effectiveness of standard and innovative HIV prevention interventions on 541 urban and 268 rural women in Florida. Generalized estimating equation analysis, accounting for repeated measures, found that for combined urban and rural samples, the innovative intervention was more effective than the standard for a number of drug and sexual risk behaviors. However, the analysis indicated no significant differences in intervention efficacy between rural and urban women. The results imply that there is a need for similar HIV prevention services in both areas. [Translations are provided in the International Abstracts Section of this issue.]

Key words. Behavior change; Drug use; HIV; AIDS; Intervention effectiveness

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