

# Coming Home From Jail: The Social and Health Consequences of Community Reentry for Women, Male Adolescents, and Their Families and Communities

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Each year, more than 10 million people enter US jails, most returning home within a few weeks. Because jails concentrate people with infectious and chronic diseases, substance abuse, and mental health problems, and reentry policies often exacerbate these problems, the experiences of people leaving jail may contribute to health inequities in the low-income communities to which they return.

Our study of the experiences in the year after release of 491 adolescent males and 476 adult women returning home from New York City jails shows that both populations have low employment rates and incomes and high rearrest rates. Few received services in jail. However, overall drug use and illegal activity declined significantly in the year after release. Postrelease employment and health insurance were associated with lower rearrest rates and drug use. Public policies on employment, drug treatment, housing, and health care often blocked successful reentry into society from jail, suggesting the need for new policies that support successful reentry into society. (*Am J Public Health*. 2005;95:1725–1736. doi:10.2105/AJPH.2004.056325)

The United States has the highest incarceration rate in the developed world. More than 2 million Americans are behind bars, and correctional costs force state governments to choose between early prisoner releases and cutbacks in health care and education. The public debate so far has focused on “back end” criminal justice issues: the death penalty, wrongful convictions, mandatory sentences, and human rights abuses in prisons.<sup>1–3</sup> For public health professionals, however, “front end” concerns—who goes to jail and what happens when they come home—may be just as compelling.

Jails are correctional facilities operated by local governments that incarcerate those awaiting trial, sentencing, or transfer to state prisons; those serving sentences of less than 1 year; and parole and probation violators. Each year, more than 10 million people are admitted to US jails.<sup>4</sup> Between 1980 and 2002, the US jail population increased by 265%.<sup>5</sup> More than three quarters of jail inmates return home within a few months; the remainder are sentenced to prison. To date, most public attention has focused on the 600 000 people returning annually from state and federal prisons rather

than the more than 7 million returning from jail. Yet because jails house large numbers of short-term inmates, many of whom have infectious and chronic diseases, addictions, mental health problems, and experiences with violence,<sup>6–10</sup> they have a profound impact on the health of low-income urban communities. The individual, family, and community disruption caused by repeated short incarcerations may contribute to the disparities in health that distinguish low-income, urban communities with high incarceration rates and high proportions of Blacks (defined here as African Americans and Afro-Caribbeans) and Latinos from communities with lower incarceration rates and higher incomes.<sup>11</sup>

We examined the life circumstances of adult women and adolescent males in the year after release from New York City jails and the policies that shape the environment to which they returned. The objectives were to describe the living conditions of people released from urban jails; to examine individual, community, and policy factors associated with postrelease drug use and criminal activity; and to consider the implications of these findings for public policies related to reentry

into the community from jail. More broadly, we hoped to explore the pathways by which incarceration and reentry policies contribute to inequities in health and to identify policies that can improve community well-being by reducing rearrest rates. Although others have described jail-based programs to mitigate HIV infection, substance abuse, and mental illness,<sup>9–14</sup> few previous studies have been able to present longitudinal data on a variety of outcomes for a large sample of jail inmates returning to their communities.

## BACKGROUND

On June 30, 2003, a total of 691 301 inmates were in jails in the United States, an incarceration rate of 238 per 100 000 residents and an increase of 46% from the 1990 rate.<sup>5</sup> Of these inmates, 88.1% were male and 11.9% female; 43.6% were White, 39.2% Black, 15.4% Hispanic, and 1.8% some other race/ethnicity. In 2003, the risk of incarceration for Blacks was 5 times higher than for Whites; for Hispanics it was almost 2 times the risk for Whites.<sup>5</sup> Jail populations are concentrated in cities: 50 of the nation’s 940 jails, all in urban areas, held 31.2% of all inmates in 2003.<sup>5</sup> While special programs for jail inmates have grown in the last decade, only 9% of US inmates were in such programs in 2003, and of these, only 3% were in drug, alcohol, or mental health treatment programs.<sup>5</sup>

In 2001 (the last year in which participants in this study were enrolled), New York City admitted 120 157 people to its 16 jails.<sup>15</sup> The average length of stay was 41 days for unsentenced detainees (70% of the jail population) and 35 days for sentenced inmates (17.5% of the population). Almost three fifths (58%) of inmates were Black, 30% Hispanic/Latino, 9% White, and 1.5% other. The average age was 31.3 years, and 7% were adolescents.<sup>16</sup>

In that year, 9% of inmates participated in drug treatment programs in the jail and 4% were “secured in a drug treatment program after their release”; a third participated in jail-based work assignments and 2% participated in vocational skills training programs.<sup>15</sup> In 2000, 61% of sentenced inmates had had prior admissions to the Department of Correction and 50% of those released returned to jail within a year.<sup>15</sup> In 1998, the last year for which data are available, anonymous serosurveys showed that the HIV infection rate among New York City jail inmates was 7.6% for males, 18.1% for females, and 0.3% for adolescent males, rates higher than among comparable nonincarcerated city residents.<sup>17</sup>

Although almost 90% of those in jail are adult males, this study focused on male adolescents and women because they are the fastest-growing sectors of the jail population. Since 1980, the number of women in prison has increased at nearly double the rate for men, and between 1985 and 1997, the number of adolescents sentenced to adult prisons more than doubled.<sup>18,19</sup>

Women and male adolescents also present unique opportunities for prevention. Because incarcerated adolescents are at earlier stages of criminal and addiction careers than adults, it may be possible to intervene to reverse a downward trajectory.<sup>20</sup> For women, incarceration has an adverse impact on families, children, and neighborhoods<sup>11,21</sup>; effective interventions can benefit women and their wider communities. Adolescents, young adults, and women played central roles in the urban epidemics of the 1980s and 1990s—crack addiction, homicide, tuberculosis, HIV infection, and other sexually transmitted infections (STIs)<sup>22–25</sup>—and jails were collection points for the most vulnerable populations. Thus, an examination of the jail and postrelease experiences of adolescent males and adult women can provide important insights into the impact of incarceration on community health and its role in creating or maintaining disparities in health.

## METHODS

### Sources of Data

This report is based on 2 sources. First, data on the experiences of women and ado-

lescent males leaving New York City jails were originally collected as part of a randomized trial of a case management and social support intervention designed to reduce drug use and rearrest among incarcerated women and male adolescents in New York City.<sup>26,27</sup> This evaluation found that although the intervention was associated with modest increases in the use of drug treatment and modest reductions in the use of some drugs, it was not associated with reductions in rearrest, heavy drug use, or drug sales, the outcomes considered here.<sup>27</sup> We examine the experiences of both intervention and comparison groups in the year after release to identify factors associated with positive and negative outcomes.

The second source is a 2-year study of public policies related to reintegration of people leaving New York City jails. Using community-based participatory research methods, a team of researchers, providers, and advocates interviewed policymakers, people returning from jail, and other stakeholders and reviewed government and advocacy reports to identify policy barriers to successful community reintegration from New York City jails.<sup>28–30</sup> We drew from these findings to identify policy obstacles that may deter individual action to reduce rearrest, drug use, or drug sales. Our goal was to gain insights into the multiple levels of influence that affect outcomes for those returning from jail.<sup>28</sup>

A total of 1410 people (706 adolescents males and 704 women) completed intake interviews in New York City jails between 1997 and 2001, and 74% (n=1048) completed the follow-up interviews 9 to 18 months (mean=15 months) after release from jail. Among those completing the second interview, 81 never left jail or were transferred directly to a prison and were excluded from this analysis. We present data here on 967 participants—491 young men and 476 women—representing 69% of the original sample.

Because the 2 groups differ by both age and gender, characteristics associated with a variety of health, substance abuse, and criminal justice outcomes, all analyses are presented separately by gender. Participants were recruited in the jail and completed an informed consent process approved by the Hunter College and New York City Department of

Health institutional review boards. Eligibility for the study included age (males, 16–19 years; females, ≥18 years), release date (eligible for release within 12 months of intake), and community of residence (participants had to plan to return to Upper Manhattan or the South Bronx, neighborhoods in which the investigators had established partnerships with community providers). Individuals with psychiatric conditions that would preclude participation in a group intervention were excluded. While all participants were volunteers who received no special legal considerations for enrolling, on basic demographic and criminal justice characteristics, the sample resembled the overall population of adolescent males and adult women leaving New York City jails.

Intake interviews, which were conducted in the jail by project staff, included questions on demographic, criminal justice, health, substance use, education, and employment histories. Follow-up interviews were conducted by interviewers from Mathematica Policy Research Inc, an independent research firm that conducted the follow-up study.<sup>27</sup> Those who completed the follow-up interview differed somewhat from nonrespondents. Compared with women who completed this interview, those who dropped out were more likely to have experienced depression; physical or sexual abuse; STIs; use of heroin, cocaine, or other hard drugs; and substance-use-related physical or social problems. Black women were more likely to complete both interviews than Hispanic women. Males who dropped out were more likely to have reported income from illegal activities prior to the index arrest than those who did not drop out. These differences suggest that the inmates with the most serious problems are underrepresented in the final sample. Despite these differences, there was enough variation on key outcomes to allow for meaningful analyses of correlates associated with those outcomes.

### Statistical Analyses

We gathered relevant characteristics of the sample at baseline and at follow-up, approximately 15 months after release from jail. We also examined the associations between *baseline variables* (behavioral and demographic characteristics of study participants at enrollment or preceding the index arrest);

*postrelease experiences* (variables that describe participants' behaviors and characteristics in the year following release); and selected *outcomes* such as rearrest on all charges, rearrest on drug charges, postrelease involvement in drug sales, and postrelease heavy use of hard drugs. A list of definitions of variables used in this study is available from the corresponding author. These outcomes were selected because they have been associated with adverse health, social, and economic consequences for individuals and their families, communities, and society.<sup>31–34</sup>

To compare participants' socioeconomic status, substance use, health, and other experiences at intake and at follow-up, we used the McNemar test for nonparametric measures with related samples. To assess the relationships between baseline variables, postrelease experiences, and key outcomes, we conducted logistic regressions and assessed the odds ratios (the exponentiated  $\beta$  coefficients), focusing on those with significance levels of  $P = .05$  or lower. We first conducted a series of logistic regression analyses, using groups of conceptually related independent variables (for example, regressing rearrest on socioeconomic factors, substance abuse variables, and health-related variables). These exploratory models were used to guide selection of variables for entry into the final regression models. We assessed the final models for statistical significance by using the  $\chi^2$  omnibus test of model coefficients and for model fit by using the Nagelkerke  $R^2$ ; we then evaluated for multicollinearity. The variable list used for each outcome was the same, with minor exceptions. Some variables, such as having income from illegal activities (for the model on drug dealing) and using hard drugs since release (for the model on heavy drug use), were so closely related to the dependent variable that they were not entered into the models. Analyses were performed with SPSS Version 11.5 (SPSS Inc, Chicago, Ill).

## RESULTS

### Life Circumstances at Arrest

*Men.* The young men in this sample faced challenging life circumstances at the time of enrollment in this study. Their average age was 17. Almost all were non-Hispanic Black

(52%) or Hispanic (45%). Few (3%) had already earned their high school diploma or a general equivalency diploma (GED), although 69% were enrolled in school or some type of educational or vocational program in the 12 months prior to their arrest. A third (34%) had worked during the 6 months prior to arrest, and many reported that illegal income (45%) and family (29%) were their primary sources of support in the 6 months prior to arrest.

Almost all (91%) had had at least 1 prior arrest. More than a quarter (27%) were on parole or probation at the time of the index arrest. A total of 83% reported marijuana use in the 6 months prior to arrest, and 14% reported having 3 or more drinks daily on average in the last month. Smaller proportions reported use of LSD (7%), cocaine (7%), heroin (2%), or crack (2%). Yet few reported participation in drug or alcohol treatment (12%) or mental health treatment (11%) in the year prior to arrest. Twenty-eight percent reported they had made someone pregnant in the last year. At the intake interview, young men identified unemployment (87%), education (83%), inadequate income (26%), substance abuse (21%), and housing (18%) as the primary problems they expected to face after release.

*Women.* Women faced different but also difficult life circumstances. Their mean age was 35 years. Sixty-six percent identified as non-Hispanic Black and 26% as Hispanic. More than a third (36%) had completed high school, a GED program, or some college. More than four fifths (83%) had children, but only 25% of the mothers lived with their children at the time of arrest. A third (34%) had been homeless in the past year, and 63% reported histories of physical or sexual abuse. Only a quarter of the women (27%) had worked during the 6 months prior to arrest; illegal income (38%) or public benefits (26%) were the primary sources of support prior to arrest.

Women had had extensive past encounters with the criminal justice system: the median number of prior arrests was 4, while 29% reported 10 or more prior arrests and 37% reported being on parole or probation at the time of arrest. Ninety-one percent reported use of crack, cocaine, or heroin in the 6 months prior to arrest and 19% averaged 3

or more drinks daily in the last month. For the year prior to arrest, half the women reported participation in drug or alcohol treatment and 14% reported participation in mental health treatment. Almost a quarter (24%) were pregnant in the year prior to arrest; of those, 28% reported pregnancy-related medical complications. At intake, women identified housing (71%), substance abuse (69%), inadequate income (65%), unemployment (40%), education (27%), and family problems with their children (22%) as the primary problems they expected to face after release.

### Comparison of Pre- and Postrelease

A comparison of living circumstances prior to arrest and 1 year after shows that respondents improved in some arenas but not others.

*Men.* A year after release, young men were less likely to get money from illegal activities such as drug selling or stealing (14% vs 61%,  $P \leq .001$ ), to receive public benefits (7% vs 30%,  $P < .001$ ), or to obtain money from family or friends (62% vs 76%,  $P < .001$ ) (Table 1). In the year after release, mean annual income from jobs and government benefits was only \$4733 (Table 2.) The highest proportion of respondents reported income from family and friends (65%), followed by formal jobs (34%), informal jobs (23%), and illegal activities (14%). At follow-up, young men were no more likely to be working than prior to arrest (34% for both time periods) and much less likely to be in school (29% vs 69%,  $P < .001$ ). In the year after release, 47% of young men were rearrested, a rate only slightly lower than the 50% rearrest rate reported by the New York City Department of Correction for a large sample of adolescent males released in 2002.<sup>35</sup>

The young men's marijuana use declined significantly, from 83% in the 6 months prior to the index arrest to 55% in the 3 months prior to the follow-up interview ( $P < .001$ ). Their use of hard drugs such as crack, cocaine, or heroin declined from 12% at intake to 4%. The proportion abstaining from alcohol increased from 42% at intake to 68% at follow-up ( $P < .001$ ). The proportions reporting physical or social drug problems also declined significantly. Participation in drug or alcohol treatment and self-help groups remained low at both assessments. At follow-up,

**TABLE 1—Adolescent Male and Adult Female Jail Inmates at Intake and 1 Year After Release (Follow-Up): New York City, 1997–2002**

	Adolescent Males, % (n = 491)		Adult Females, % (n = 476)	
	Intake	Follow-Up	Intake	Follow-Up
Work, school, income				
Employed <sup>a</sup>	34	34	27	27
Enrolled in school/training <sup>b</sup>	69	29***	14	32***
Received income from following <sup>a</sup>				
Any public/government sources	30	7***	51	60***
Family	76	62***	26	56***
Illegal activities	61	14***	48	19***
Drug use <sup>c</sup>				
Marijuana	83	55***	40	18***
Cocaine	7	3***	37	14***
Crack	2	...*	65	20***
Heroin	2	1*	31	9***
Methadone	1	...	22	15***
Abstained from alcohol in last month	42	68***	59	76***
Alcohol/drug-related problems <sup>d,e</sup>				
Any social problem	56	11***	76	30***
4 or more social problems	11	3***	36	8***
Any physical problem	43	8***	41	13***
4 or more physical problems	6	1***	8	3***
Health <sup>b</sup>				
Asthma	22	13***	41	39
Any STI	4	3	17	12***
Depression	12	5***	24	31***
Anxiety	4	1*	15	25***
Any mental health problem	15	6***	30	39***
Attempted suicide (ever)	11	NA	20	NA
Treatment <sup>b</sup>				
Any mental health treatment/counseling	11	4***	14	28***
Emergency room visit	26	16***	41	51***
Overnight hospitalization	10	4***	26	24
Trauma				
History of physical abuse (victim)	15	NA	55	NA
Been hit or slapped since release	NA	8	NA	18
Forced to have sex <sup>b</sup>	1	...	11	6***

Note. NA = not applicable; STI = sexually transmitted infection; ellipses (...) denote less than 0.5%.

<sup>a</sup>Timeframe for intake question was past 6 months; for follow-up survey, time frame was "since you were released" from index incarceration.

<sup>b</sup>Timeframe for intake question was past 12 months; for follow-up, time frame was since release (average = 15 months).

<sup>c</sup>Timeframe was past 6 months for intake question and past 3 months for follow-up.

<sup>d</sup>For social problems, time frame was past 30 days for intake question and past 3 months for follow-up question. For physical problems, timeframe was 6 months on intake questionnaire and 3 months on follow-up questionnaire.

<sup>e</sup>Social problems included missing work or school, fighting, family problems, financial problems, homelessness, arrest, and social rejection. Physical problems included blackouts; seizures; overdose; hearing voices or seeing things; shakes, tremors or delirium tremens (DTs); vomiting; and violence.

\* $P \leq .05$ ; \*\* $P \leq .01$ ; \*\*\* $P \leq .001$ . All differences tested with McNemar nonparametric test for related samples.

few young men reported that they had many friends who used hard drugs (7%) or drank heavily (9%). Emergency room use, hospitalizations, and use of mental health services

declined significantly over time (data not shown).

*Women.* The proportion of adult women enrolled in educational programs increased

significantly (from 14% to 32%;  $P < .001$ ), although the proportion working did not change. Compared with baseline, more women received money in the postrelease period from families (26% vs 56%;  $P < .001$ ) and from public benefits (51% vs 60%;  $P < .001$ ), while fewer received income from illegal activities (48% vs 19%;  $P < .001$ ).

After release, the mean annual income from jobs or public benefits for women was \$6827, with \$1470 in supplemental income from family or friends, \$3406 from illegal activities, and \$431 from informal jobs. At follow-up, the most frequently reported sources of income were family and friends (71%), followed by public benefits (58%), formal jobs (27%), and illegal activities (19%) (Table 2). At follow-up, 43% of women reported that they had many friends who worked or attended school. In the year after release, 39% of women were rearrested, the same rate reported by the New York City Department of Correction for a large sample of women released in 2002.<sup>35</sup> The rates of homelessness in the past year were high at both assessments (34% vs 30%).

Women's use of marijuana, crack, cocaine, and heroin declined significantly, as did related physical and social problems (Table 1). However, participation in drug treatment or self-help groups did not increase, with more than half the women reporting such participation at both intervals. More women reported that they had abstained from alcohol in the past 3 months than at intake (59% vs 76%;  $P < .001$ ). At follow-up, few women reported that they had many friends who used hard drugs (11%) or drank heavily (8%).

The asthma rate among the women remained quite high, while STI prevalence declined. Both anxiety and depression, however, increased in the postrelease period (from 15% to 25% [ $P < .001$ ] and from 24% to 31% [ $P < .001$ ], respectively), as did use of mental health services (from 14% to 28%;  $P < .001$ ).

### Factors Associated With Improvements in Outcomes

*Men.* Among young men, baseline characteristics that increased the odds for rearrest within 15 months were Hispanic ethnicity (odds ratio [OR] = 1.70) and higher number

**TABLE 2—Annual Income of Adolescent Males and Adult Females After Leaving Jail: New York City, 1997–2002**

	Conventional Sources of Income (Annualized) <sup>a</sup>			Alternative Sources of Income (Total Received Since Release From Prison) <sup>b</sup>		
	Government Sources <sup>c</sup>	Formal Jobs	Total From Jobs and Government Sources	Under-the-Table Jobs	Illegal Activities	Family and Friends
<b>Adolescent males (n = 491)</b>						
Mean, \$	212	4521	4733	439	2486	594
Median, \$	0	0	0	0	0	200
% (n) reporting income from this source	4.9 (24)	34 (167)	37 (181)	23 (112)	14 (68)	65 (320)
Mean, \$	4340	13 292	12 839	779	17 954	911
Median, \$	5130	12 480	10 920	359	2000	500
<b>Adult females (n = 476)</b>						
Mean, \$	3133	3694	6827	431	3406	1470
Median, \$	1638	0	2724	0	0	100
% (n) reporting income from this source	58 (277)	27 (130)	71 (338)	12 (58)	19 (89)	71 (336)
Mean, \$	5384	13 524	9614	299	18 218	2082
Median, \$	3336	10 400	5166	55	1500	500

<sup>a</sup>Assumes any jobs held would be held for 12 consecutive months, thus overestimating actual income.

<sup>b</sup>Average time since release from prison at interview was 15 months.

<sup>c</sup>Includes home relief, supplemental security income, social security, social security disability, welfare, food stamps, and income from the Division of AIDS Services (New York City Human Resources Administration).

of prior arrests (OR=1.14), with each prior arrest increasing the probability of rearrest by 14% (Table 3). In the year after release, having a job reduced the likelihood of rearrest by two thirds (OR=0.33); having health insurance was also associated with lower rearrest rates (OR=0.31). Puzzlingly, marijuana use was associated with substantially lower rearrest rates (OR=0.36). Several postrelease factors were associated with higher rearrest rates. Those reporting drug- or alcohol-related problems were more than 3 times more likely to be rearrested (OR=3.43) than those without such problems. Unexpectedly, those who reported having many peers who regularly attended school or work were 3 times more likely to be rearrested (OR=3.21) than those reporting no such friends. Reporting income from illegal activity was a substantial risk, increasing the odds of rearrest almost 9-fold (OR=8.96). Factors associated with rearrest on drug charges included having government benefits (OR=5.60) and having a close relationship since release (OR=3.02).

Factors associated with postrelease drug dealing included having health problems since release (OR=2.28), having problems getting along with others (OR=2.64), and

previous arrests (OR=1.12 for each arrest). Factors inversely associated with selling drugs included having income from a job (OR=0.55) and using marijuana since release (OR=0.35).

Only 4% of the young men reported frequent use of hard drugs such as crack, cocaine, or heroin. Factors associated with this drug use included living with someone who uses alcohol or drugs (OR=67.65) and using hard drugs prior to the index arrest (OR=38.47). Protective factors included having a job since release (OR=0.07).

*Women.* Postrelease factors associated with adult women's rearrest included having income from illegal activities (OR=4.76), reporting drug- or alcohol-related social problems since release (OR=2.44), and experiencing homelessness (OR=2.70) (Table 4). A history of previous arrests was also a risk factor (OR=1.02 for each arrest), with women, on average, having 10 prior arrests. Job income was associated with a lower likelihood of rearrest, such that each \$100 increase in weekly salary (up to \$500) was associated with a 24% reduction in the likelihood of rearrest (OR=0.76). Reporting of physical problems related to drug or alcohol use (OR=0.38) was also significantly associated

with lower rates of rearrest. Factors associated with rearrest on drug charges included having a child at home (OR=0.29), which reduced the chance of a drug charge, whereas reporting unmet health needs (OR=2.37) or having an STI (OR=3.44) since release increased the odds of drug-related rearrest.

We also examined factors related to the likelihood of dealing drugs in the postrelease period, reported by 14% of the women. Having a child at home (OR=0.27) and having health insurance (OR=0.44) reduced the risk of dealing drugs, while having an STI increased the risk (OR=2.98).

More than a quarter of women (28%) reported heavy use of hard drugs in the year after release. Factors associated with a higher risk of this outcome included postrelease use of marijuana (OR=3.95), participating in postrelease drug treatment (OR=3.35), living with a drug or alcohol user (OR=2.74), having income from illegal activity (OR=2.06), having a history of hard drug use prior to the index arrest (OR=21.08), and experiencing homelessness since release (OR=1.99). Protective factors for this outcome were participating in self-help drug or alcohol programs (OR=0.25), participating in job training or educational programs

**TABLE 3—Correlates of Rearrest on All Charges/Drug Charges, Reported Drug Dealing, and Heavy Use of Hard Drugs: Adolescent Males, New York City, 1997–2002**

	Odds Ratio (95% Confidence Interval)			
	Rearrested on Any Charge <sup>a</sup>	Rearrested on Drug Charges <sup>b</sup>	Reported Drug Dealing <sup>c</sup>	Heavy Use of Hard Drugs <sup>d</sup>
Hispanic (vs not)	1.70 (1.02, 2.83)*	1.09 (0.61, 1.94)	0.72 (0.32, 1.63)	4.65 (0.87, 24.80)
No. of previous arrests	1.14 (1.05, 1.24)**	1.06 (0.98, 1.14)	1.12* (1.01, 1.24)	0.96 (0.77, 1.20)
<b>Socioeconomic characteristics</b>				
Experienced homelessness since release	1.42 (0.42, 4.83)	1.52 (0.48, 4.78)	2.88 (0.60, 13.73)	0.00 (0.00, 0.00)
Have child at home since release	0.675 (0.23, 2.00)	0.49 (0.09, 2.71)	0.92 (0.15, 5.77)	0.00 (0.00, 0.00)
Have had some jobs since release, formal or informal	0.33 (0.17, 0.64)**	0.71 (0.33, 1.52)	1.50 (0.59, 3.85)	0.07 (0.01, 0.91)*
Weekly salary since release (increments of \$100, up to \$500)	1.11 (0.89, 1.39)	0.94 (0.73, 1.22)	0.55 (0.37, 0.82)**	0.60 (0.06, 6.03)
Have income or benefits from government sources since release	1.63 (0.51, 5.18)	5.60 (1.60, 19.56)**	1.09 (0.18, 6.46)	0.00 (0.00, 0.00)
Have income from illegal activity since release	8.96 (3.62, 22.16)**	NA	NA	8.70 (0.45, 168.14)
<b>Substance abuse</b>				
Used coke, crack, or heroin prior to index arrest	1.73 (0.78, 3.79)	1.29 (0.56, 2.98)	0.58 (0.14, 2.42)	38.47 (5.39, 274.73)***
Reported some drug- or alcohol-related physical problems since release	1.47 (0.49, 4.36)	1.59 (0.37, 6.86)	0.79 (0.09, 7.09)	NA
Reported some drug- or alcohol-related social problems since release	3.43 (1.23, 9.55)*	0.69 (0.17, 2.84)	0.26 (0.03, 2.22)	NA
Used cocaine, crack, or heroin since release	0.80 (0.20, 3.30)	1.27 (0.25, 6.55)	3.19 (0.33, 31.43)	NA
Used marijuana since release	0.36 (0.22, 0.58)**	0.45 (0.25, 0.81)**	0.35 (0.15, 0.80)**	8.84 (0.96, 81.67)
No. of occasions having ≥ 5 drinks in 3-mo period since release	0.97 (0.89, 1.05)	1.02 (0.93, 1.12)	0.89 (0.72, 1.11)	1.05 (0.91, 1.21)
<b>Health/trauma</b>				
Reported physical health problems (other than STIs) prior to index arrest	0.88 (0.53, 1.46)	0.73 (0.41, 1.31)	0.61 (0.28, 1.37)	0.96 (0.19, 4.83)
Reported STIs prior to index arrest	0.39 (0.11, 1.33)	0.28 (0.04, 1.95)	4.07 (0.83, 20.05)	1.08 (0.05, 24.22)
Reported mental health problems prior to index arrest	0.98 (0.49, 1.93)	0.92 (0.41, 2.05)	1.21 (0.41, 3.54)	2.06 (0.24, 17.62)
Reported physical health problems (other than STIs) since release	1.79 (0.97, 3.32)	0.93 (0.46, 1.89)	2.28 (1.00, 5.20)*	0.95 (0.12, 7.41)
Reported STIs since release	2.04 (0.39, 10.83)	0.57 (0.07, 4.48)	0.31 (0.04, 2.63)	0.00 (0.00, 0.00)
Reported mental health problems since release	2.88 (0.87, 9.57)	2.67 (0.81, 8.88)	2.96 (0.79, 11.16)	0.00 (0.00, 0.00)
Have had health insurance since release	0.31 (0.18, 0.54)**	0.09 (0.03, 0.24)**	0.57 (0.23, 1.38)	1.21 (0.19, 7.60)
Have needed health care and been unable to obtain since release	0.52 (0.19, 1.41)	0.78 (0.23, 2.72)	1.98 (0.56, 7.03)	0.00 (0.00, 0.00)
Been hit or slapped since release	2.12 (0.78, 5.75)	1.17 (0.40, 3.44)	2.09 (0.63, 6.88)	2.96 (0.01, 1686.19)
<b>Social support</b>				
Have had close relationship since release	1.41 (0.71, 2.89)	3.02 (1.05, 8.73)*	1.21 (0.36, 4.04)	1.01 (0.12, 8.75)
Frequency of family support since release				
Almost always	(Reference)	(Reference)	(Reference)	(Reference)
Never/rarely	0.65 (0.24, 1.82)	0.73 (0.17, 3.09)	0.68 (0.13, 3.44)	5.40 (0.39, 75.26)
Some of the time	1.15 (0.65, 2.03)	1.13 (0.60, 2.14)	0.58 (0.23, 1.48)	0.19 (0.03, 1.36)
Live with someone who abuses drugs or alcohol	2.53 (0.70, 9.44)	0.18 (0.02, 1.56)	0.44 (0.04, 4.70)	67.65 (5.38, 850.39)***
Close contacts who work regularly or attend school				
None	(Reference)	(Reference)	(Reference)	(Reference)
Many	3.21 (1.60, 6.43)	1.74 (0.75, 4.04)	2.06 (0.61, 6.94)	5.63 (0.26, 123.35)
A few	1.08 (0.57, 2.05)**	1.01 (0.45, 2.29)	1.97 (0.61, 6.35)	4.92 (0.33, 73.48)
Have experienced serious problems getting along with others since release	0.75 (0.43, 1.30)	1.39 (0.75, 2.57)	2.64 (1.16, 6.05)*	0.16 (0.03, 1.05)
<b>Service participation (since release)</b>				
Eligible for additional Health Link support	1.15 (0.72, 1.85)	0.93 (0.54, 1.61)	1.13 (0.54, 2.37)	1.46 (0.30, 7.26)
Received education/training	0.95 (0.53, 1.69)	1.36 (0.68, 2.72)	2.10 (0.88, 5.02)	0.91 (0.11, 7.48)
Received drug treatment	0.67 (0.23, 1.95)	0.93 (0.30, 2.91)	1.40 (0.41, 4.78)	1.07 (0.03, 44.68)
Participated in self-help programs	0.85 (0.25, 2.92)	1.76 (0.51, 6.11)	2.47 (0.60, 10.17)	0.00 (0.00, 0.00)
Had mental health/counseling services since release	1.92 (0.48, 7.70)	1.62 (0.45, 5.90)	1.12 (0.22, 5.67)	0.00 (0.00, 0.00)
<b>Statistics</b>				
Omnibus test of model coefficients, $\chi^2$ (P)	182.74 (.000)	91.14 (.000)	109.04 (.000)	79.92 (.000)
Nagelkerke R <sup>2</sup>	.43	.29	.41	.59

Note. NA = not applicable; STI = sexually transmitted infection.  
<sup>a</sup>Rate of rearrest on any charge was 47% for adolescent males.  
<sup>b</sup>Rate of rearrest of drug charges was 21% for adolescent males.  
<sup>c</sup>Rate of reported drug dealing was 13% for adolescent males.  
<sup>d</sup>Rate of heavy use of hard drugs was 4% for adolescent males.  
 \*P ≤ .05; \*\*P ≤ .01; \*\*\*P ≤ .001.

**TABLE 4—Correlates of Rearrest on All Charges/Drug Charges, Drug Dealing, and Heavy Use of Hard Drugs: Adult Women, New York City, 1997–2002**

	Odds Ratio (95% Confidence Interval)			
	Rearrested on Any Charge <sup>a</sup>	Rearrested on Drug Charges <sup>b</sup>	Reported Drug Dealing <sup>c</sup>	Heavy Use of Hard Drugs <sup>d</sup>
Hispanic (vs not)	0.72 (0.39, 1.33)	0.91 (0.44, 1.89)	1.06 (0.50, 2.25)	1.20 (0.64, 2.27)
No. of previous arrests	1.02 (1.00, 1.04)*	1.01 (0.99, 1.03)	1.01 (0.99, 1.03)	1.01 (0.99, 1.02)
<b>Socioeconomic characteristics</b>				
Experienced homelessness	2.70 (1.54, 4.70)***	1.76 (0.95, 3.27)	0.72 (0.36, 1.44)	1.99 (1.07, 3.70)*
Have child at home	0.62 (0.30, 1.26)	0.29 (0.09, 0.95)*	0.27 (0.07, .99)*	1.28 (0.60, 2.76)
Have had some jobs, formal or Informal	1.25 (0.64, 2.42)	1.41 (0.66, 3.01)	1.18 (0.50, 2.79)	0.41 (0.18, 0.93)*
Weekly salary (increments of \$100, up to \$500)	0.76 (0.58, 0.99)*	0.69 (0.49, 0.97)*	0.87 (0.60, 1.26)	0.81 (0.54, 1.22)
Have income or benefits from government sources	1.23 (0.68, 2.22)	1.09 (0.56, 2.13)	2.00 (0.96, 4.17)	0.92 (0.48, 1.78)
Have income from illegal activity	4.76 (2.49, 9.10)***	NA	NA	2.06 (1.08, 3.94)*
<b>Substance abuse</b>				
Used coke, crack, or heroin prior to index arrest	2.00 (0.61, 6.64)	0.91 (0.22, 3.73)	3.32 (0.37, 29.51)	21.08 (2.26, 196.66)*
Reported some drug- or alcohol-related physical problems since release	0.38 (0.16, .90)*	0.36 (0.13, 0.98)	0.92 (0.34, 2.49)	NA
Reported some drug- or alcohol- related social problems since release	2.44 (1.16, 5.12)*	1.71 (0.71, 4.09)	1.60 (0.65, 3.92)	NA
Used coke, crack, or heroin since release	0.85 (0.41, 1.75)	0.94 (0.39, 2.24)	1.11 (0.46, 2.69)	NA
Used marijuana since release	1.05 (0.50, 2.18)	1.25 (0.52, 2.98)	1.13 (0.46, 2.76)	3.95 (1.93, 8.08)***
No. of occasions having ≥ 5 drinks in 3-mo period since release	0.98 (0.94, 1.02)	0.99 (0.95, 1.04)	1.00 (0.97, 1.04)	1.07 (1.00, 1.14)*
<b>Health/trauma</b>				
Reported physical health problems (other than STIs) prior to index arrest	1.08 (0.54, 2.17)	1.83 (0.73, 4.55)	1.35 (0.51, 3.57)	1.77 (0.76, 4.16)
Reported STIs prior to index arrest	1.05 (0.51, 2.16)	0.85 (0.38, 1.92)	0.62 (0.25, 1.53)	0.62 (0.26, 1.47)
Reported mental health problems prior to index arrest	0.97 (0.54, 1.72)	1.22 (0.63, 2.37)	0.98 (0.47, 2.05)	1.47 (0.77, 2.79)
Physically or sexually abused prior to index arrest	1.22 (0.70, 2.11)	1.21 (0.62, 2.36)	1.12 (0.55, 2.29)	0.81 (0.44, 1.49)
Reported physical health problems (other than STIs) since release	0.90 (0.43, 1.88)	0.81 (0.34, 1.98)	1.15 (0.45, 2.91)	1.69 (0.73, 3.92)
Reported STIs since release	2.05 (0.86, 4.91)	3.44 (1.43, 8.29)**	2.98 (1.23, 7.24)*	0.83 (0.32, 2.15)
Reported mental health problems since release	1.14 (0.63, 2.06)	0.68 (0.34, 1.34)	0.57 (0.27, 1.24)	0.72 (0.38, 1.38)
Has had health insurance since release	0.19 (0.10, .34)***	0.33 (0.17, 0.65)***	0.44 (0.21, 0.91)*	1.01 (0.55, 1.98)
Have needed health care since release and been unable to obtain it	0.95 (0.45, 2.01)	2.37 (1.10, 5.10)*	1.96 (0.86, 4.45)	1.97 (0.90, 4.32)
Raped since released	3.48 (0.90, 13.43)	2.92 (0.82, 10.35)	2.15 (0.59, 7.83)	1.87 (0.54, 6.47)
Been hit or slapped since release	0.87 (0.42, 1.81)	1.25 (0.57, 2.74)	1.10 (0.47, 2.58)	1.39 (0.66, 2.96)
<b>Social support</b>				
Had close relationship since release	0.86 (0.40, 1.85)	0.54 (0.25, 1.18)	0.73 (0.32, 1.67)	0.58 (0.27, 1.28)
Frequency of family support since release				
Almost always	(Reference)	(Reference)	(Reference)	(Reference)
Never/rarely	1.67 (0.78, 3.57)	2.14 (0.95, 4.85)	2.47 (1.02, 5.98)	0.50 (0.22, 1.18)
Some of the time	1.43 (0.75, 2.74)	1.55 (0.72, 3.27)	1.59 (0.70, 3.62)	0.87 (0.41, 1.83)
Live with someone who abuses drugs or alcohol	0.92 (0.44, 1.92)	0.68 (0.26, 1.79)	1.12 (0.45, 2.81)	2.74 (1.24, 6.04)**
Close contacts who work regularly or attend school				
None	(Reference)	(Reference)	(Reference)	(Reference)
Many	1.73 (0.81, 3.67)	1.11 (0.47, 2.60)	1.34 (0.52, 3.45)	0.41 (0.18, 0.92)*
A few	1.42 (0.68, 2.91)	0.78 (0.33, 1.81)	1.47 (0.60, 3.60)	0.79 (0.37, 1.67)
Have experienced serious problems getting along with others since release	0.71 (0.41, 1.24)	1.26 (0.66, 2.40)	1.53 (0.76, 3.05)	1.47 (0.78, 2.79)
<b>Service participation (since release)</b>				
Eligible for additional Health Link support	0.96 (0.58, 1.57)	0.80 (0.45, 1.42)	0.56 (0.30, 1.05)	0.79 (0.45, 1.37)
Received education/training	1.50 (0.83, 2.71)	1.07 (0.53, 2.16)	0.92 (0.42, 1.99)	0.30 (0.14, 0.63)***
Received drug treatment	0.95 (0.52, 1.73)	0.69 (0.34, 1.43)	0.84 (0.39, 1.79)	3.35 (1.70, 6.64)***
Participated in self-help programs	0.60 (0.33, 1.10)	1.55 (0.76, 3.17)	1.03 (0.48, 2.20)	0.25 (0.13, 0.48)***
Had mental health/counseling services since release	1.47 (0.78, 2.76)	2.40 (1.17, 4.94)*	0.93 (0.42, 2.07)	0.70 (0.35, 1.44)
<b>Statistics</b>				
Omnibus test of model coefficients, $\chi^2$ (P)	162.04 (.00)	108.49 (.00)	61.05 (.01)	182.99 (.00)
Nagelkerke R <sup>2</sup>	.42	.35	.23	.49

Note. NA = not applicable; STI = sexually transmitted infection.

<sup>a</sup>Rate of rearrest on any charge was 39% for adult women.

<sup>b</sup>Rate of rearrest of drug charges was 20% for adult women.

<sup>c</sup>Rate of reported drug dealing was 14% for adult women.

<sup>d</sup>Rate of heavy use of hard drugs was 28% for adult women.

\*P ≤ .05; \*\*P ≤ .01; \*\*\*P ≤ .001.

(OR=0.30), having some type of work after release (OR=0.41), and having many friends or family members who work or attend school regularly (OR=0.41).

## DISCUSSION

Our findings demonstrate that young men and women returning home from New York City jails face challenging life circumstances. Fifteen months after release, only about a third of the participants held formal jobs, and 14% of the young men and 19% of the women still reported income from illegal activities. Annual incomes for both populations were well below any definition of poverty, forcing both groups to rely on alternative sources of income such as illegal activity and handouts from family and friends. More than half the young men were still using marijuana and a quarter of the women were still using cocaine, crack, or heroin. Nearly 2 in 5 women reported mental health problems. Less than a third of the young men were enrolled in school, even though less than 20% had earned a high school diploma or GED. Women reported high rates of emergency room use (51%) and hospitalization (24%). Fifteen months after release, 47% of the young men and 39% of the women had already been rearrested, beginning a new cycle of incarceration and release.

Despite these obstacles, many participants had also made positive changes in their lives. Compared with the period prior to the index arrest, more women were enrolled in educational programs, fewer participants were getting income from illegal activities, and fewer reported substance use or its associated problems. These findings demonstrate that people leaving jail can take action to improve their lives. While material factors such as jobs, job-related income, and health insurance were most consistently associated with reduced risk of negative outcomes, some services were also associated with reduced risk of heavy drug use among women, suggesting that interventions can be helpful, at least on some drug use pathways.

These findings identify both protective and risk factors for criminal and substance use outcomes. While the study design does not enable us to determine the causal role of

postrelease experiences, the literature is consistent with the findings reported here. For example, postrelease employment and job income were associated with lower rearrest rates, drug dealing, and heavy drug use for young men and with lower rearrest rates (both overall and drug-related) and lower heavy drug use for women. Several studies show that postrelease employment reduces recidivism, drug use, and crime.<sup>36,37</sup> Finding jobs for released inmates could be an important priority for policy action, since there is evidence that employment interventions in correctional settings can reduce rearrest and criminal behavior.<sup>38,39</sup>

Having health insurance after release protected both young men and adult women against several adverse outcomes, an important finding for policy action. The complex relationships among postrelease substance use and these outcomes provide further evidence that the current zero-tolerance approach may need reassessment. For example, social problems related to drug and alcohol use (e.g., difficulties at work or school or with family) but not drug use itself are associated with rearrest for both young men and adult women, perhaps because these problems elicit police involvement. Interventions designed to help people returning from jail to reduce these problem behaviors, even if they are unable to end drug use, could lead to lower rearrest rates. In contrast, for the adult women, physical drug problems, such as overdose or vomiting, were associated with lower rearrest rates, perhaps because such symptoms brought women to the attention of health care or drug treatment providers rather than to police.

For young men (but not adult women), postrelease marijuana use was associated with lower rates of rearrest on all charges, rearrest on drug charges, and drug dealing. In fact, on the basis of their own reporting, the young male marijuana users were less likely to engage in several types of violent or property-related crimes and less likely to deal in marijuana or hard drugs than the young men who were not marijuana users. These results suggest that focusing police resources on marijuana use may not yield public safety benefits. However, the data also show that marijuana use is associated with heavy drug use. By addressing marijuana use within drug

treatment and vocational programs, it may be possible to help heavy users to reduce overall drug use.

With some exceptions, current configurations of services for people leaving jail do not appear to lead to improved outcomes. Very few young men participated in postrelease drug treatment or mental health services, self-help groups, or educational or vocational programs, and such participation was not associated with lower rates of rearrest, drug dealing, or hard drug use. This suggests a need to rethink how such services are offered, perhaps focusing on the employment needs young men indicate as their primary problem. For the adult women, use of mental health services or participation in self-help programs was associated with lower rates of heavy drug use, although not with other outcomes.

Peer support also plays a complicated role, operating in contradictory ways for the 2 populations. For young men, more peer support is associated with rearrest, perhaps because such young men are more out in the world and therefore more visible to the heavy police scrutiny in their communities. For adult women, peer support is associated with lower rates of heavy hard drug use. For both groups, living with a substance user is strongly associated with heavy drug use, suggesting the importance of either bringing other members of the household into drug treatment or helping people to find new living arrangements. In order to develop more effective interventions, these differences in peer support need to be further explored so as to leverage beneficial peer support while protecting against negative peer pressure.

## Gender and Age Differences

These 2 populations showed similarities as well as marked differences in the pathways leading home from jail and in the obstacles they encountered. Both need jobs, income, and health insurance and are protected against adverse outcomes when they get them. While we cannot disentangle the effects of life stage from gender in this sample, the combined effect is striking. As a result of their age and sex, women have much higher rates of physical or sexual abuse, more serious drug problems, and increased anxiety or depression in the year

after release, with increased use of mental health services. For women, incarceration remains a stigmatizing and shameful experience,<sup>26</sup> suggesting that incarceration may exacerbate psychological symptoms for women. Other investigators have postulated that for women, untreated mental health problems contribute to addiction and that the quality and gender-appropriateness of drug treatment is as important as treatment access.<sup>40,41</sup> Deficits in the quality and availability of such mental health and drug treatment services, especially for women with children, may deter successful reentry into the community.

Males and females also differed in their assessment of the most important problems they would face after leaving jail. Women identified housing and substance abuse as top priorities, while young men said unemployment and education were most important. After release, women did experience problems with substance use and housing and young men with work and school, suggesting that people leaving jail have realistic assessments of their reentry priorities.

These results suggest there is no single, gender-neutral pathway home from jail. Rather, young men and women encountered gender- and age-specific obstacles. Too often, programs and policies fail to account for these differences, making it difficult, for example, for young men to return to school after release<sup>42</sup> or for women to find drug treatment services prepared to meet their parenting or mental health needs.<sup>43</sup>

### The Role of Policy

Both individual choices and social policy contribute to reincarceration, heavy drug use, or involvement in drug sales. Therefore, any strategy to improve outcomes must identify needed policy changes as well as changes in social services and individual behavior.

Although New York City's jail system is among the nation's leaders in providing services to inmates, our review suggests that several public policies related to corrections, income, benefits, housing, health care, and drug treatment hinder rather than support released inmate's successful reintegration into the community.<sup>29</sup> Since unsuccessful reintegration poses such high costs to public safety,

community health, family stability, and municipal budgets,<sup>10,44–47</sup> identifying policy changes that can improve these outcomes is an urgent priority.

*Public benefits.* Following passage of federal welfare reform in 1996, the number of people on public assistance and those receiving food stamps in New York City fell by almost 500 000 by 2000.<sup>15</sup> These 2 safety net programs can help to supplement the income of low-income people. Half the women (51%) and less than 1% of adolescent males in this study reported receiving food stamps in the year after release from jail, although almost all met the eligibility standards for food stamps. To reduce dependency and the cost of public services, New York City tightened eligibility standards and erected barriers to enrollment in these program,<sup>48</sup> barriers subsequently found to violate federal law.<sup>49</sup> These changes made it more difficult for low-income people, including those leaving jail, to meet basic needs. For some, this pressure may have contributed to illegal activities that increased risks for rearrest.

*Housing.* Housing policies also complicated reentry.<sup>50</sup> Citing federal regulations, the New York City Housing Authority mandated eviction of families that included individuals returning from incarceration.<sup>51</sup> Some families were faced with the choice of losing their home or forcing their returning son or daughter into homelessness. Families play important positive and negative roles in reintegration. They offer financial support, for example, and women who have children at home are less likely to be involved in the drug trade. However, having a drug user in the household increases the odds of heavy drug use. Policies that discourage family reunification or that fail to assess the specific circumstances of families increase the likelihood that returning inmates will receive negative rather than positive peer influences. They also fail to reward the significant social capital that families invest in helping their relatives to succeed.

*Health insurance.* Federal regulations do not allow inmates to receive Medicaid coverage while incarcerated,<sup>52</sup> and New York state chose to terminate rather than suspend Medicaid coverage for jail inmates. Although almost all participants in the study met income eligibility standards for Medicaid, a year after re-

lease only half of the women (55%) and less than a quarter of the young men (23%) had Medicaid coverage. Yet health insurance coverage is strongly associated with reduced rearrest rates for both sexes and for drug dealing among women. In previous analyses, we found that women in this sample with Medicaid coverage were more likely to receive primary health care in the year after release than those without coverage (J. Lee, N. Freudenberg, and D. Vlahov, unpublished data, 2005).

Too often, public policies interrupt medical coverage and erect barriers to reenrollment in insurance for those leaving jail, despite their high rates of infectious diseases, chronic conditions, mental illness, and substance abuse. Such policies can lead to drug-resistant strains of pathogens, to the worsening of chronic diseases such as asthma and diabetes, and to greater likelihood that the mentally ill will endanger themselves or others or will be rearrested.<sup>53</sup> These medical outcomes are associated with high rates of health care use, putting further stress on the nation's urban safety net programs and municipal budgets. Together, these findings suggest that improved health care and increased access to health insurance can facilitate reentry.

*Drug treatment and mental health.* Substance abuse policies also complicate reintegration into the community. Although most study participants reported problems related to substance use, a finding confirmed for the full New York City jail population by the federal jail drug testing program,<sup>54</sup> only 42% of the women and 5% of the young men participated in drug treatment during the period of incarceration in which they were interviewed. Moreover, by 2002, owing to budgetary constraints, most drug treatment programs within New York City jails were eliminated.<sup>55</sup>

As a result of the deinstitutionalization of the mentally ill and the war on drugs, more mentally ill people can now be found in New York City (and US) jails than in its mental hospitals.<sup>56,57</sup> A 10-year legal battle between prison advocates and the city ultimately forced New York City to establish a new program for inmates with serious mental illness,<sup>58</sup> although advocates continue to charge that implementation is haphazard. Our findings show that those with less serious psychological problems also have trouble finding

services. More respondents report mental health problems than get treatment. Previous research has shown that unresolved mental health problems increase the risk of rearrest and drug use, especially for women.<sup>59,60</sup>

**Employment and income.** For people leaving incarceration, employment provides income for basic needs, structures daily life so as to reduce the temptation to use drugs or engage in crime, and reduces the pressure to earn money through illegal activities. In this study, income from illegal activity was one of the strongest correlates of rearrest. Some research shows that vocational training and employment, especially better-paying and higher-quality jobs, reduce reincarceration.<sup>38,39</sup> At intake, 87% of the young men and 40% of the women identified unemployment as one of their main problems. Yet at follow-up, only about a third were working and a third had enrolled in educational programs that could help them get jobs. Since 2001, the federal government has cut funds for job training programs by more than \$1.5 billion.<sup>61</sup> Because work reduces the risk of rearrest for young men, reductions in job training may ultimately impose higher costs on taxpayers.

Even when participants were able to find work, the jobs did not provide enough income to survive. As a result, more than three fifths of participants turned to family and friends for financial support. While this type of aid may reduce reliance on public benefits and help people returning from jail get on their feet, in the long term it risks alienating the people who could provide the positive ongoing support to avoid a return to drug use or criminal activity. Increasing minimum wages and opening doors to better jobs for ex-offenders may offer public safety benefits.

Only a small fraction of New York City jail inmates are offered vocational training while incarcerated; most high schools discourage reenrollment of students returning from jail<sup>42</sup>; state law bans people with a history of incarceration from dozens of occupations<sup>62</sup>; and employers consistently and legally discriminate against applicants with a history of incarceration.<sup>63</sup> These policies make it significantly harder for returning inmates to become productive members of their communities.

In summary, evidence suggests that many current policies on reintegration of people

leaving jail and prison are ineffective and expensive and have adverse health and social consequences for individuals, families, and communities.<sup>32,45,64</sup> A recent study by the New York City Independent Budget Office found that the annual cost per capita of incarceration in city jails was \$92 500.<sup>65</sup> As governments face competing demands for education, health care, police, and economic development, many are questioning continued reliance on an expensive system that emphasizes incarceration over rehabilitation and reintegration.<sup>66</sup>

In New York City in the last 2 years, in response to financial pressures and persistent advocacy by services providers, prisoners' rights groups, and researchers, some city officials have begun to develop and implement new jail and community-based job training, health, and substance abuse programs focused on rehabilitation.<sup>67</sup> These are promising first steps, but it remains to be seen whether these modest efforts are sustained, are brought to scale, deliver quality services, and become institutionalized.

### Limitations

This study has several limitations. First, the sample was recruited in 1 city, limiting our ability to generalize to other cities. However, several recent reports document similar health and social problems facing people returning from jail or prison in other large cities,<sup>43,68</sup> suggesting at least some common issues. Second, since all participants volunteered to enroll, they may not be representative of the jail population as a whole, limiting the ability to generalize to all jail inmates. Since inmates with more serious problems were less likely to complete the follow-up interview, our findings may underestimate the difficulties inmates face. Third, all data in this study are self-reported, with the potential for measurement error and social desirability effects. However, both intake and follow-up interviews were completed by similar procedures, reducing the likelihood of differential bias.

In addition, staff completing the follow-up interviews were different from those leading the intervention, reducing the potential for social desirability biases. In some cases, the time interval for which drug use was assessed

at baseline and follow-up was not consistent, complicating assessments of change. Finally, although information was collected in 2 separate interviews—at intake and again 15 months after release—postrelease experiences and outcomes were assessed at the same time in the follow-up interview. Thus, it is not possible to determine whether postrelease experiences associated with outcomes are causal or the result of some common prior factor.

### Conclusions

Our findings show the central role that health plays in the lives of people leaving jail. These individual experiences have a significant impact on community health. In the 1980s and early 1990s, jails became an amplification point for a variety of ills,<sup>69,70</sup> serving either as a place of infection (in the case of tuberculosis) or a school for behaviors that put communities at risk. Our society's failure to develop policies and programs that can help the millions of people incarcerated in the last decade to return to their communities, avoid reincarceration, reduce substance abuse, and become healthy productive members of their community may undermine the health gains made in many urban areas during the prosperity of the late 1990s. Given the high rates of incarceration among low-income, Black, and Hispanic populations, such a reversal could contribute to or exacerbate the persistent socioeconomic and ethnic/racial disparities in health that characterize the United States today.

Public health professionals can help develop employment, educational, substance abuse, health, and mental health programs that reintegrate people returning from incarceration and can advocate for policies that reduce obstacles to successful reentry. By so doing, they can promote health among our nation's most disadvantaged populations and help to reverse the health inequities that threaten its commitment to social justice. In the short term, our findings suggest that increasing job training and postrelease employment opportunities and providing health insurance coverage and access to primary care are specific priorities. By advocating for these first steps, public health professionals can contribute to a process that makes coming home from jail an experience that restores

rather than disrupts individuals, families, and communities. ■

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### Contributors

N. Freudenberg designed and led the studies reported here and had main responsibility for writing the article. J. Daniels helped to write the article and interpret findings. M. Crum and T. Perkins analyzed data, interpreted findings, and reviewed drafts of the article. B. E. Richie helped to design the studies and interpret findings.

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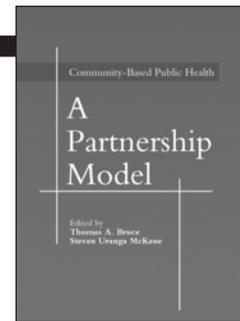
### Human Participant Protection

The Hunter College and New York City Department of Health institutional review boards approved the study of people leaving New York City jails and reviewed and approved all instruments and procedures. The New York City Department of Health institutional review board also reviewed and approved the follow-up study by Mathematica Policy Research Inc. The Hunter College institutional review board reviewed and approved the study of policies related to jail reentry in New York City.

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