The ANNALS of the American Academy of Political and Social Science

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The online version of this article can be found at:

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American Academy of Political and Social Science

Structuring and Re-Creating Inequality: Health Testing Policies, Race, and the Criminal Justice System

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Research shows that prison inmates have a higher risk of contracting HIV than the general population, which prompts measures aimed at diagnosis, quarantine, and treatment. Research has also linked released inmates to an increase in the HIV incidence rate of communities. The authors explore the disjuncture between institutional policies and potential community outcomes by evaluating health assessments of inmates before and during prison admission. The authors argue that the penal institution is an active agent in structuring and re-creating health inequalities within prisons, thereby exacerbating existing community health inequities when inmates are released. Using data from the 2002 Survey of Inmates in Local Jails and the 2004 Survey of Inmates in State and Federal Prisons, the authors find significant racial, educational, and marital inequalities in health testing and test results. These inequalities vary across types of institutional testing policies and inmate cohorts, with later admission cohorts being less likely to receive HIV tests and future release cohorts having a higher likelihood of being HIV-positive.

Keywords: race; health; HIV; incarceration

Health disparities and risks of incarceration are strongly race- and class-based. Indeed, incarceration is a new stage in the life course of undereducated men, with 60 percent of black men with less than a high school education expected to serve time in prison (Pettit and Western 2004). The communities from which these men are drawn suffer from high

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rates of morbidity and mortality as a consequence of various family and health disparities (Lynch and Sabol 2004; Piquero et al. 2006; Rich 2000; Sabol and Lynch 2003; Williams and Collins 1995). One such health disparity is the prevalence and incidence of the human immunodeficiency virus (HIV). A growing body of work has focused on the spread of communicable diseases in prisons (e.g., Hammett, Harmon, and Rhodes 2002), and recent scholarship has linked the incidence of HIV in communities to the release of inmates (e.g., Johnson and Raphael forthcoming). The connection between inmate release and new cases of HIV is important because racial inequality in criminal justice may exacerbate community health disparities. Here, we examine one consequence of racialized patterns of crime and justice that may be related to community health outcomes: racial disparities in HIV testing and prevalence before and during admission to prison.

This topic is important for several reasons. First, scholars have documented a variety of negative consequences related to serving time in prison. Labor market and marital prospects, reoffending, mental health, political involvement, and physical health are all negatively associated with having spent time in prison (Hagan and Donitzer 1999). Yet, researchers have overlooked one potentially positive externality related to entering prison: inmates' gaining access to institutionalized health care. Research shows persistent racial and ethnic disparities in health care use among nonprison populations (Fiscella et al. 2002), but little is known about health care use, rates of screening services, and immunizations within prisons. Institutionalized health care and its use among prisoners may perpetuate and reinforce observed racial and ethnic health disparities if incoming and outgoing prison cohorts are differentially tested, diagnosed, and treated for various diseases.

This topic is also important because inmates are at a higher risk for contracting HIV/AIDS than the general population (Maruschak 2006). This has implications for the health of communities when flows of inmates are released. Empirically, work on HIV/AIDS in prison largely focuses on measuring and accounting for the pervasiveness of this disease among inmates (Braithwaite and Arriola 2003; Maruschak 2004), determining if and how it is transmitted within penal institutions (Horsburgh et al. 1990), and evaluating effective programs for treatment and prevention (Nicholson-Crotty and Nicholson-Crotty 2004). Few studies have focused on how health testing at admission to prison structures and re-creates health inequalities among prisoners and communities. The penal system is an ideal case study for examining the role that institutions play in shaping and structuring particular health outcomes because inmates receive medical evaluations when admitted to prison. Examinations of state and prison policies aimed at assessing the health of inmates reveal health disparities stemming from practices and processes whereby some inmates receive health evaluations while others do not. Systematic differences in health screenings by race and socioeconomic status, due to discrimination and racism, would mean that prisons structure health inequalities internally and that they re-create the very health inequities inmates would likely endure outside the penal system.

Structuring Inequality

Little is known about prison and jail policies regarding HIV testing and treatment. In fact, the circumstances wherein inmates are tested for HIV are highly variable; inmates in jails and prisons are subject to different testing guidelines depending on when and where they enter and exit. For instance, in 2004, eighteen states (down from nineteen in 2000) had policies specifically aimed at testing all inmates matriculating into state prisons and local jails, while only two states (down from five in 2000) had policies for testing inmates in custody, and three states (the same as in 2000) tested prisoners upon release (Maruschak 2004). In addition, between 2000 and 2004, federal policy shifted from testing all inmates upon release to only testing high-risk groups—representing an institutional change that could have significant import for understanding how institutions structure health inequalities for inmates and the communities that absorb them upon release. This shift means that the federal system makes a determination as to who is "most" at risk and, in doing so, may overlook substantial numbers of inmates whose HIV status changes (e.g., from negative to positive) during incarceration. In fact, in 2004, only one state (Alabama) tested all inmates entering *and* leaving state custody, whereas in 2000, three states (Alabama, Missouri, and Nevada) did so. Because many inmates may not be tested and/or treated, these federal and state policies could have direct and measurable effects for matriculating and exiting cohorts and their communities.

Re-Creating Inequality

Prisons and jails can help to ameliorate health inequalities depending on their policies, the state, how policies are implemented, and when inmates are exposed to them. Yet, given the variability in testing policies across states and time, jails and state/federal prisons can also re-create the very health disparities that plague an inmate's sending community. Below, we compare model estimates for inmates who did not receive an HIV test at admission but were tested (i.e., ever tested) prior to incarceration to similar inmates who were tested at admission to prison. If prisons/jails do not re-create health inequalities by race and socioeconomic status, model estimates for these two groups should be similar. However, if inmates at admission have lower chances of being tested, relative to inmates who were tested outside the prison system, this would mean that prisons and jails re-create health inequalities as many low-income, nonwhite neighborhoods suffer from low rates of STD testing. If racial and socioeconomic differences in health assessments occur, before and during admission to prison, this could have devastating consequences for returning inmates' home communities because confinement increases the likelihood of becoming HIV-positive. Forecasting the health and health needs of inmates released from prison by cohort would enable communities to prepare for waves of inmates with varying health needs and in this regard

would inform and serve an important policy issue. This article attempts to provide evidence relevant to such a forecast by examining HIV testing before and during admission to prison and by exploring the understudied interconnections between race, imprisonment, and health.

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Data

We pool data from the 2004 Survey of Inmates in State and Federal Correctional Facilities (SISFCF) and the 2002 Survey of Inmates in Local Jails (SILJ). Men and women in the SISFCF were separated into two sex-specific sampling frames. Respondents were randomly chosen from a two-stage sampling design, where the first stage relies on data from the 2000 Census of State and Federal Correctional Facilities and the second stage sampled respondents from a list of inmates who used a bed the previous night. A complete description of the two-stage sampling frame for both sexes can be found in the 2004 SISFCF codebook. After numbering the list, a computerized algorithm randomly selected 18,185 inmates in federal and state prisons. Similarly, the SILJ has a two-stage sampling frame where jails and inmates are selected in the first and second stages, respectively. In the first sampling stage, approximately 460 jails were selected from six separate strata based on the population counts of men, women, and juveniles in each jail, which resulted in 6,982 male and female respondents sampled from local jails. In all, there are 25,167 male and female inmates in our sample from local, state, and federal institutions.

Measures of Central Variables

The two dichotomous dependent variables in the analysis are (1) whether the inmate received an HIV test and (2) whether the inmate tested positive for HIV.

TABLE 1
VARIABLE OPERATIONALIZATION

	Operationalization	Coding
Dependent variables		
Tested at admission	Was respondent tested for HIV at admission?	Yes = 1 and no = 0
Ever tested	Was the respondent ever tested for HIV?	Yes = 1 and no = 0
Test result	Was the test result positive for HIV?	Yes = 1 and no = 0
Independent variables		
White	Respondent is a non-Hispanic white	Baseline racial comparison group
Black	Respondent is a non-Hispanic black	Black = 1 (0=otherwise)
Latino/Asian	Respondent is Latino or Asian	Latino/Asian = 1 (0=otherwise)
Less than high school	Respondent has less than a high school diploma	LT HS = 1 (0=otherwise)
High school	Respondent has a high school diploma	HS = 1 (0=otherwise)
Some college	Respondent has some college or more	Baseline education group
Divorced/widowed	Respondent is divorced or widowed	Divorced/widowed = 1
Separated	Respondent is separated from spouse	Separated = 1
Married	Respondent is married	Baseline marital group
Age	Age of respondent	Positive, discrete measure from 18–85
Release 2003–2004	Respondent to be released from prison in 2003 or 2004	Baseline reference group
Release 2005–2009	Respondent to be released from prison between 2005 and 2009	Released = 1 (0=otherwise)
Release 2010–2014	Respondent to be released from prison between 2010 and 2014	Released = 1 (0=otherwise)
Release 2015–2019	Respondent to be released from prison between 2015 and 2019	Released = 1 (0=otherwise)
Release after 2020	Respondent to be released from prison after 2020	Released = 1 (0=otherwise)
Admitted before 1990	Respondent entered prison before 1990	Baseline reference group
Admitted 1990–1993	Respondent entered prison between 1990 and 1993	Admitted = 1 (0=otherwise)
Admitted 1994–1996	Respondent entered prison between 1994 and 1996	Admitted = 1 (0=otherwise)
Admitted 1997-1999	Respondent entered prison between 1997 and 1999	Admitted = 1 (0=otherwise)
Admitted 2000-2003	Respondent entered prison between 2000 and 2003	Admitted = 1 (0=otherwise)
Federal prison	Respondent is in federal prison	Baseline reference group
Local jail	Respondent is in local jail	Jail = 1 (0=otherwise)
State prison	Respondent is in state prison	State = 1 (0=otherwise)
Entry	State policy is to test all inmates upon entry?	Yes = 1 and no = 0
Custody or release	State policy is to test all inmates in custody or before release?	Yes = 1 and no = 0
High risk	State or federal policy to test high-risk populations?	Yes = 1 and no = 0

SOURCE: Survey of Inmates in State Federal Prisons (2004); Survey of Inmates in Local Jails (2002).

The two measures of HIV testing are as follows: one asks whether the inmate was tested during the prison admission process and if he or she knew the test results. If the inmate was not tested at admission to prison, the inmate was asked if he or

she had ever had an HIV test prior to being admitted to prison, with a follow-up question inquiring about the respondent's HIV status. Very few inmates who were admitted to prison having already had an HIV test were aware of the test results, hindering estimation of how HIV status is influenced by the demographic and cohort characteristics of inmates. For neither measure of HIV (i.e., tested at admission vs. tested prior to admission) is there a question about treatment for HIV-positive inmates during incarceration. Two independent variables are central to the analysis of HIV testing: race/ethnicity and institutional policies. With respect to race/ethnicity, *white* is the reference group. *Blacks* are coded 1 if the respondent is African American and 0 if not, while *Latinos/Asians* are coded 1 if the respondent is Hispanic or of Asian/Pacific Islander descent and 0 if not. With respect to institutional policies, *entry* is coded 1 if the state or federal law mandates testing prisoners when they enter prison, 0 otherwise. *Custody/release* is coded 1 if prisoners are required to be tested while in custody or upon release from prison, 0 otherwise. *High risk* is coded 1 if the state or federal policy requires that high-risk groups be tested, 0 otherwise. Our analysis also controls for several important independent predictors associated with health disparities, including age, education, and marital status. A complete description of all variables is presented in Table 1.

Models and Analytical Strategies

We estimate the probability of being tested and testing positive for HIV using a logistic regression model that includes a vector of ($\mathbf{Xi}$) individual-level demographic characteristics and two sets of cohort-fixed effects. We also include state-fixed effects (δ_s) to capture the unobserved heterogeneity occurring within states over time (e.g., different crime rates and different criminal justice system/corrections responses).

$$\log[\Pr(y_i = 1)/\Pr(y_i = 0)] = \alpha + \beta \mathbf{Xi} + \gamma_t + \lambda_{t+k} + \theta_p + \delta_s + \varepsilon_i. \qquad (1)$$

Standard errors are clustered at the state level to account for variance in inmate responses across states.

The first cohort effect (γ_t) represents the period of matriculation into prison. We include this cohort effect for several reasons. First, with the rise of crimes (and especially drug markets and ensuing use) and mass incarceration during the mid-1980s and into the 1990s, different matriculating cohorts may have experienced varying health needs. Given racial disparities in crime and incarceration rates, the propagation of mass incarceration through the 1990s could result in later cohorts' having greater health disparities because of the disproportionate rise in the number of (black) men incarcerated across cohorts. This assumes that the underlying propensity for the disease does not decline. Yet, the promulgation of safe sex and health initiatives surrounding HIV prevention gained momentum in the early to mid-1990s, which may have affected the health composition of

cohorts entering prison. Our cohort effects for prison admission capture how the health of each entering cohort changes in the presence of mass incarceration and public health initiatives.

Additionally, we include a second set of cohort effects (λ_{t+k}) that forecasts how inmate release may affect community health. t represents when the individual entered prison, and k is a scalar for the length of his or her sentence. $t + k$ is the year in which the inmate is to be released from prison. If different release cohorts are less likely to have been tested for HIV, or if different release cohorts have a higher probability of being HIV-positive, then these cohort-specific terms could help explain why HIV incidence rates wax and wane across communities and states over time when correlated with flows from prison. Furthermore, we include policy indicators (θ_p) to capture differences in HIV testing guidelines for inmates in state, federal, and local custody. Institutional testing policies are not used in models predicting whether an inmate is HIV-positive. Although there may be reason to believe that testing policies may have indirect effects on the spread of HIV in prison, modeling the diffusion process is beyond the scope of this study. If the policies matter for structuring health inequalities, we expect to find significant testing and health differences between inmates in institutions where the policies exist.

HIV Testing

We examine whether there are systematic differences in HIV testing in prison at the time of admission net of other factors. Table 2 displays results from our multivariate logistic regression model of being tested for HIV. The coefficients are odds ratios. An odds ratio of less than 1 indicates that the given demographic group or socioeconomic characteristic has a lower probability of being tested than the group it is being compared to, net of other factors. Conversely, an odds ratio greater than 1 indicates that the group or attribute has a greater probability of being tested than the group it is being compared to after accounting for other characteristics. In Table 2, models 1 through 3 estimate the likelihood of being tested for HIV at admission, and models 4 through 6 estimate the probability of having ever been tested for HIV if the inmate is not tested at admission. Besides race/ethnicity and testing policies, our models include controls for a set of socio-economic characteristics of respondents, release and admission cohorts, and institutional types.

We find significant racial differences in HIV testing prior to and during admission to prison. Blacks have significantly greater odds of being tested for HIV at admission than whites (by about 29 percent), and if inmates are not tested at admission, black inmates are 33 percent more likely to report ever having an HIV test, relative to similar whites. Significant racial disparities exist for Latinos and Asian inmates. In models 1 through 3, there was one significant difference between whites and Latinos/Asians in being tested at admission compared to whites, but when considered alongside self-initiated testing (i.e., ever tested), racial

TABLE 2
**ODDS RATIOS PREDICTING THE LIKELIHOOD OF HAVING AN HIV TEST AT
ADMISSION TO PRISON AND PRIOR TO ADMISSION**

	Tested at Admission? ($n = 10{,}640$)			Ever Tested? ($n = 5{,}603$)		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Central theoretical variables						
Black	1.270****	1.287****	1.293****	1.336****	1.334****	1.332****
Latino/Asian	0.911	0.876*	0.991	0.672****	0.659****	0.671****
Entry			2.357****			1.287**
Custody or release			1.367***			1.055
High risk			1.228***			1.057
Control variables						
Male	0.861**	0.886*	0.866**	0.587****	0.584****	0.585****
Age	0.996	0.994*	0.995	0.994*	0.993**	0.993**
Less than high school	1.013	1.068	1.035	0.743****	0.735****	0.733****
High school	0.841**	0.943	0.927	0.855*	0.899	0.900
Never married	0.970	1.018	1.030	0.952	0.957	0.957
Divorced	1.213**	1.260***	1.226**	1.038	1.063	1.061
Separated	1.243*	1.335**	1.348**	0.994	1.032	1.031
Release 2005–2009	1.154**	0.959	0.978	0.991	0.817***	0.817***
Release 2010–2014	0.982	0.803**	0.811*	0.726**	0.607****	0.610****
Release 2015–2019	0.901	0.751*	0.782	0.984	0.849	0.865
Release after 2020	1.033	0.890	0.937	0.798	0.686**	0.688**
Admitted 1990–1993	1.187	1.290	1.309	1.000	1.016	1.009
Admitted 1994–1996	1.055	1.142	1.133	1.261	1.293	1.299
Admitted 1997–1999	0.867	0.940	0.965	1.229	1.243	1.254
Admitted 2000–2003	0.620****	0.741**	0.749**	1.235	1.411**	1.418**
Local jail		0.278****	0.350****		0.610****	0.647***
State prison		0.625****	0.587****		0.905	0.896

SOURCE: Survey of Inmates in State Federal Prisons (2004); Survey of Inmates in Local Jails (2002).
NOTE: White, college/some college, married, entering prison before 1990, and having a release date of 2003 to 2004 are the reference categories. All models are clustered by state to account for different variance patterns.
*$p < .1$. **$p < .05$. ***$p < .01$. ****$p < .001$.

differences emerge quite strongly. Latinos/Asians are about 33 percent less likely to ever have been tested for HIV relative to whites. Although the odds of being tested at admission are lower for Latinos/Asians (model 2) as compared to whites, the testing gap widened significantly in the absence of institutional intervention. This suggests that institutionalization may have narrowed HIV testing differences between whites and Latinos/Asians but not blacks.

Institutional policies regarding HIV testing significantly structure and determine whether an inmate is tested for HIV at admission. The odds of inmates being tested at admission for the disease are 2.36 times greater for states with an entrance policy, relative to states without such a policy. Inmates in states with an entrance policy, but who were tested on their own prior to incarceration, were 29 percent more likely to have ever been tested for HIV than inmates in states without such a policy. Similarly, inmates in states with testing guidelines that mandate inmate testing while in custody or before release are 37 percent more likely to have been tested than states without such a policy. Inmates in states that designate testing high-risk individuals are 23 percent more likely to be tested than inmates in states that lack this mandate. These results indicate that where an inmate serves time has significant implications for understanding potential health effects, with institutions and state policies determining whether an inmate is likely to learn about his or her health status in the absence of individual predispositions.

A number of additional inmate characteristics affect HIV testing. As Table 2 shows, the odds ratio for men (.86) is 14 percent lower (= .86 – 1) than for women, indicating that men are less likely to have been tested at admission than women. Yet this disparity increases for inmates who were not tested at admission. Men are about 41 percent less likely than women to have ever been tested for HIV outside penal intervention. The sizeable widening of the gender gap indicates that institutional intervention has narrowed HIV testing disparities between men and women. Inmates with a high school education are 16 percent less likely to have been tested than inmates with some college education or more. Educational disparities in testing at admission do not appear to be salient after accounting for institutional factors (model 3), but the same is not true for inmates who were tested prior to incarceration. High school dropouts are about 27 percent less likely to have ever been tested for HIV, relative to inmates with some college education, and these significant differences hold after accounting for the type of institution and testing policy. Institutionalization appears to attenuate the testing disparities between inmates with the most and least amount of education. Marital status is a significant predictor of being tested, with separated and divorced/widowed inmates being 21 to 24 percent more likely to be tested than those who are married. Controlling for type of penal institution and testing policies do not attenuate these findings, but these marital differences do not exist among inmates who have been tested outside the penal system, which indicates that the penal system may differentially determine which marital status matters for HIV testing.

When an inmate matriculates to prison has a significant impact on whether he or she will be tested for HIV. Inmates admitted between 2000 and 2003 are 25 to 38 percent less likely to have been tested for HIV at admission than inmates who were in custody prior to 1990. Yet, among inmates tested outside the penal system, the 2000 to 2003 admission cohort has significantly greater odds of being tested than earlier cohorts. It is possible that the shift away from institutional testing since 2000 may have occurred in tandem with individualized responsibility for testing prior to incarceration.

Additionally, we examine whether there are significant testing differences among expected release cohorts. Inmates expected to be released between 2005 and 2009 have significantly greater odds of being tested than inmates in the 2003 to 2004 cohort, but this finding disappears when institutions and policies are controlled. Yet, among inmates tested prior to incarceration, the 2005 to 2009 cohort is about 18 percent less likely to have been tested for HIV. Inmates to be released between 2010 and 2014 are about 20 percent less likely to have been tested at admission, and cohort inmates tested outside the penal system are about 39 percent less likely to have been tested. Inmates who have had their HIV status assessed prior to incarceration and expected to be released after 2020 are about 31 percent less likely to have been tested, even though there are no systematic HIV testing differences at the time of admission. These findings suggest that the release of certain cohorts may have some effect on future community health outcomes, given structural and personal differences in testing. To the extent that they acquire sexually transmitted diseases, including HIV, while incarcerated but are not tested and/or treated, then they may bring these health problems into the communities that receive them, and this may pose significant health consequences.

Finally, we also find that where an inmate is serving time significantly predicts whether he or she is tested at admission. Inmates in local jails are 65 to 72 percent less likely to be tested at admission than federal inmates. Among inmates tested prior to incarceration, imprisonment in a local jail is associated with a 35 to 39 percent reduction in the odds of ever being tested for HIV. Prisoners in state correctional facilities are 37 to 41 percent less likely to be tested at admission than prisoners in federal custody, after controlling for demographic and policy differences between inmates and institutions. Yet, there are no significant differences in ever having been tested for HIV among prisoners who were tested before incarceration.

HIV Test Results

Table 3 presents our findings for the HIV status of inmates. Models 1 and 2 are for inmates who were tested at admission and had a positive result. The next two models include all inmates who are HIV-positive, regardless of whether they were tested before or during admission to prison. We pool these inmates to assess whether socioeconomic and institutional correlates are attenuated when compared to inmates who were only tested at admission.

We find significant racial disparities in the likelihood of being HIV-positive. The odds of blacks testing positive for HIV are about 79 percent greater than for whites, even after accounting for where they serve time. The likelihood of Latinos/Asians being HIV-positive at admission is 94 percent greater than whites of similar characteristics. Including blacks who were tested prior to incarceration lowers the odds of black inmates testing positive for HIV, but the effects remain significant. However, the same is not true for Latinos/Asians. Including inmates who were tested prior to incarceration more than doubles the odds that

TABLE 3
ODDS RATIOS PREDICTING THE LIKELIHOOD OF TESTING
HIV-POSITIVE AT ADMISSION AND PRIOR TO ADMISSION

	HIV+ at Admission ($n = 8,453$)		All HIV+ ($n = 11,756$)	
	Model 1	Model 2	Model 3	Model 4
Central theoretical variables				
Black	1.782***	1.799***	1.729***	1.750***
Latino/Asian	1.894***	1.994***	1.950***	2.024***
Control variables				
Male	0.748	0.716*	0.774	0.749*
Age	1.057****	1.058****	1.057****	1.058****
Less than high school	2.245***	2.040**	2.028***	1.889**
High school	1.670	1.530	1.439	1.383
Never married	2.129***	2.033***	1.995***	1.937***
Divorced	0.999	0.955	1.030	1.006
Separated	1.697	1.601	1.536	1.486
Release 2005–2009	0.700*	0.756	0.759	0.778
Release 2010–2014	1.181	1.347	1.264	1.348
Release 2015–2019	1.067	1.176	1.061	1.105
Release after 2020	1.353	1.468	1.361	1.399
Admitted 1990–1993	0.423*	0.395*	0.410*	0.387**
Admitted 1994–1996	0.693	0.655	0.641	0.607
Admitted 1997–1999	0.724	0.686	0.766	0.730
Admitted 2000-2003	1.066	0.980	0.913	0.876
Local jail		2.121**		1.309
State prison		1.722**		1.533**

SOURCE: Survey of Inmates in State Federal Prisons (2004); Survey of Inmates in Local Jails (2002).
NOTE: White, college/some college, married, entering prison before 1990, and having a release date of 2003 to 2004 are the reference categories. All models are clustered by state to account for different variance patterns, and we report robust standard errors.
*$p < .1$. **$p < .05$. ***$p < .01$. ****$p < .001$.

Latinos/Asians are HIV-positive, indicating that testing at admission has signifi-cant import for inmate health assessments.

Educational disparities are also present in who is likely to have HIV. Although Table 2 showed no testing disparities at admission for different educational groups, health disparities emerge quite strongly. Inmates with less than a high school diploma are more than twice as likely to be HIV-positive than inmates with some college education. These effects are reduced slightly when inmates tested independent of the penal system are included, but the overall disparities remain.

Additionally, while there are significant differences in testing at admission for marital groups—with the never-married showing no differences in being tested—never-married inmates are twice as likely to be HIV-positive as married inmates. Including all prisoners tested before prison reduces the odds slightly; however, the significant differences in HIV prevalence remain between the never-married and married inmates.

The odds of being HIV-positive are about 30 percent lower among the release cohort of 2005 to 2009, but this finding disappears when we account for confinement type. The cohort admitted between 1990 and 1993 has significantly lower odds of being HIV-positive by 57 to 61 percent. All other release and admission cohorts show no signs of differences in HIV by cohort. An inmate's confinement location is a significant predictor of HIV status. Inmates in local jails are more than twice as likely to be HIV-positive than inmates in federal prison when tested at admission. However, this finding disappears when all inmates are included, regardless of whether they were tested at or before admission to prison. The odds that a state prisoner is HIV-positive are about 53 to 72 percent greater than inmates in federal prison, and significant differences remain after the inclusion of inmates who are tested prior to admission.

Discussion

Discussion about issues surrounding race and crime has long been mired in an unproductive mix of controversy and silence (Sampson and Wilson 1995). This is unfortunate because basic research on the relationship between race and crime and the system's responses have important bearing on theoretical and policy matters. Assessing inmates' health status during incarceration could contribute to developing avenues of disease prevention, thereby lessening diffusion of disease through both institutions and communities: an important public health goal. One particular policy-relevant issue that has heretofore been neglected in social science research is the extent to which racialized patterns in crime and justice may be related to inmate release and community health outcomes generally and to racial disparities in HIV testing before and during admission to prison in particular. Empirically investigating this issue is particularly important from a community perspective because such basic knowledge can help forecast to what extent certain health problems may be coming into communities upon inmate releases. Our investigation sought to examine how racial inequality in criminal justice may structure and re-create health inequities among different groups of inmates through a lack of systematic health testing and disease prevalence. Given that certain groups of respondents are significantly more likely to be tested than others, this is evidence that institutions play a role in structuring and discerning the health of particular sociodemographic groups due to variation in state and penal policies regarding testing, thereby re-creating health disparities that may incur negative consequences on receiving communities.

Our findings indicate that institutional policies can re-create health outcomes for particular demographic groups (blacks) and even ameliorate testing disparities between groups (Latinos/Asians and inmates with less than a high school education). At the same time, we find evidence that institutionalization can structure health disparities (as in the case of marital groups) when none existed prior to incapacitation. Race effects in HIV testing and prevalence are robust to institution type and penal policies, which indicates that racial disparities in health outcomes remain after accounting for political and institutional differences between prisoners. Our findings highlight the importance of race as a central determinant of health within prisons and jails.

Race effects in HIV testing and prevalence are robust to institution type and penal policies, which indicates that racial disparities in health outcomes remain after accounting for political and institutional differences between prisoners.

Although our effort is important and documents salient differences with respect to testing and identification of HIV, much more work remains to be done. For example, we did not examine the reasons some, but not all, inmates are tested at admission; nor are we able to assess racial differences in treatment. While health care costs are likely to be a major component in decision making regarding testing and treatment, it is important to attempt to screen and provide basic health care services to infected inmates. Additionally, our data do not allow us to examine how inmate sexual behavior serves as a potential transmittal for HIV. It is possible that individuals (from certain demographic groups) differentially engage in behavior that increases their probability of becoming infected. Documenting this process is integral to understanding transmission within and beyond the prison walls.

In conducting this research, we join other researchers who have recently begun to focus their efforts on understanding the consequences of inmate reentry into communities and to pay particular attention to concerns that inmates may bring back with them into their communities that could exert a negative toll. We believe, and our research suggests, that the criminal justice system may have an indirect impact on the health and social well-being of communities by testing inmates for communicable diseases and getting inmates started upon a course of treatment.

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