

***Incarceration, Community Stability, and
Infectious Disease in the United States:
Understanding the Links***

Sharif R. Sawires

**AIDS Policy Development Center
UCLA Program in Global Health
Division of Infectious Diseases
David Geffen School of Medicine
University of California, Los Angeles**

August 10, 2007

The United States has earned the ignominious status as the world's largest incarcerator of its own citizens. Few areas in the public domain so saliently highlight the paradoxes surfacing at the intersection of health, human rights, and social justice as incarceration. But how did the United States—a country which believes its ideological fabric to be equity, fair play, and equal access to democratic institutions—obtain this dubious distinction and what are the social and health consequences for the populations most severely impacted? In this article, we characterize the repercussions of mass incarceration on community stability and infectious disease (HIV), then present several critical interventions intended to promote a corrective public health trajectory.

Incarceration trends can not be reducible to changes in criminal behavior alone; they are also a function of policy. Understanding the crisis in this framework enables us to investigate whether mass incarceration is in fact magnifying the accumulation of health and social disadvantage for already marginalized populations(1). From the public health vantage point, identifying and characterizing the critical failures that have resulted in a social and public health crisis of epidemic proportion is clear. They include: 1) twenty years of failed drug-related incarceration policies; 2) the resistance by U.S. policy makers to infectious disease harm-reduction measures widely accepted by international bodies; 3) fragmented and inconsistent infectious disease testing and treatment policies for inmates; 4) critical and pervasive deficiency in comprehensive discharge planning and community reentry programming; 5) the increasing numbers of ethnic minorities incarcerated or on parole; 6) the near complete collapse of effective parole in providing anything more than surveillance of technical violations; 7) the destabilizing effect of “churning” individuals through of a cycle of incarceration, community release, re-incarceration. Translating what is known about the critical failures over the last three decades into specific evidence-based programming will require dramatic and sustained changes in policy and public sentiment. Vigilantly avoiding polemic and ideological frameworks that are inconsistent with harm reduction is essential. Only then will it be possible to begin mitigating unequally distributed public health and social burdens and empowering the most affected communities so that they have increasing agency over their health and social welfare.

Seven million U.S. citizens (3.2% of the population or 1 in every 32 adults) are held in local jails, state prisons, federal prisons, or under correctional supervision (probation or parole)(2). The growth of incarcerated populations in the U.S. over the last 3 decades is staggering. The overall number of inmates in the custody of State and Federal prisons and local jails (excluding probation or parole) exceeded 2.2 million in 2006(3). Between 1974 and 2001, the rate of persons ever-incarcerated doubled from 1,251 to 2,673 per 100,000(4). By 2005, the national average incarceration rate reached 491 per 100,000 for prisons, and if jails are included the overall incarceration rate was 737 per 100,000(5), an incarceration rate 5 to 8 times higher than other industrialized nations(6). One of every 15 persons will serve time in a State or Federal prison during their lifetime based on the current rate of incarceration and the probability is substantially higher for the African American and Latino population—their lifetime probability of incarceration is almost 19% and 10% respectively. Of all groups, African American males have the highest lifetime probability of incarceration estimated at a rate of 32% compared to 17% for Latino males and 3.4% for white males(7). If rates of first incarceration remain unchanged, 6.6% of all persons born in the United States in 2001 will go to prison during their lifetime, up from 1.9% in 1974(4).

More Incarcerations/More Releases

The obvious effect of more incarcerations is the need for higher capacities in existing detention facilities and the construction of additional facilities, draining valuable resources that could be used for evidence-based programs—and there are many—that address incarceration risks, programs that reduce recidivism, and services that support successful community reentry. The less obvious phenomenon, one that is critical to understanding the destabilizing community and public health effects of mass incarceration is that *more incarcerations mean more releases*. 95% of all State prisoners will eventually be released, 80% of whom will be released to parole. Some 600,000 former inmates will be returned to their communities and families annually. Although the average state sentence is 4 ½ years, the average inmate will serve <2 1/2 years prior to being released. Jail sentences are typically much shorter, on the order of 3 months total. While some inmates serve longer prison sentences, many, particularly those serving time for a technical violation of parole, are released within a few months(8). The Bureau of Justice Statistics reports that over forty percent of all State and 27% percent of Federal prisoners have less than one year to serve. State and Federal prison admission are growing only slightly faster than releases. In the 2004 and 2005 calendar years admissions grew by 4.7% from 699,812 to 733,009, while releases grew 3.9% from 672,202 to 698,459. Extensive evidence has demonstrated that inmates involved in harm reduction, educational, and skills programming have a higher success rate upon release. Yet more often than not, released individuals have received little or no programmatic services that assist in community reentry and the ability to independently manage their health. They also face the added stigma of being an ex-felon.

Collateral Consequences

Social stigmatization pales in comparison to the structural stigmas or “collateral consequences”—the more tangible losses of societal benefits and access to entitlement programs. In fact the safety net on which many of the most vulnerable populations depend are no longer available to ex-felons, who now find themselves in a precarious economic and health standing. Martin Igochi and colleagues summarize several of the most hindering collateral consequences in their discussion of the rise in felony drug convictions, noting ex-felons will face the following decreases in: 1) Employment that provides sustainable income and the related health benefits ; 2) access to public housing due to legislation passed in 1996; 3) access to food stamps due to passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA); 4) PRWORA also restricts access to many jobs requiring special licenses or permits as well as military service; 5) access to government financial support for higher education; 6) the right to vote in many states which is temporarily or in some cases permanently revoked(9). The PRWORA’s lifetime ban that prohibits those convicted of drug-related felonies from receiving federally funded public assistance and food stamps dismantles the entitlement safety net that so many of those released from prison who have difficulty obtaining work would critically depend on. Furthermore, the provision is limited to those convicted of felony drug convictions—those serving sentences for murder or property offences are still eligible(10). While on the surface this appears to be a race-neutral policy, it has a disparate impact on African Americans due to their high incarceration rates for drug related crimes. Although some privileges like Medicaid and drivers licenses can be reinstated, in many cases the process is complicated and difficult to navigate.

Considering the extensive hurdles ex-felons face upon release, the fact that most had serious social and health needs prior to incarceration that were largely unaddressed in prison, most had poor education, are unskilled, without familial support systems, and the added collateral consequences of incarceration, it becomes evident why community failure and recidivism rates are so high. As more State resources are used to construct new detention facilities, fewer resources are available for parole services which increasingly limit parole to supervision. Add the unrealistic conditions imposed by many parole boards, like “no association with persons with criminal records” or the requirement of “gainful employment”, social scientists have argued we have created unrealistic conditions for success(8).

“Churning”

More than two-thirds of all those released from prison will be rearrested within 3 years, of which more than half will be re-incarcerated for a new prison sentence or technical parole violation. Among inmates released in 1994, within the first 6 months of release, 29.9% were rearrested for a felony or serious misdemeanor, within the first year the cumulative total grew to 44.1%, and within the first 2 years, 59.2%. By 3 years from their release, an estimated 67.5% were rearrested(11). Being African American, male, and younger are all predictors of higher re-arrest rates. Joan Petersilia explains that these high recidivism rates are one of the major factors resulting in the growing prison population(8). Between 1971 and 1999, national recidivism due to parole failures rose from 17% to 35% of new prison admissions. Petersilia notes that in some states (e.g. California) parole violators account for as many as two-thirds of new admissions. This effect of cycling through detention facilities, referred to as “churning”, has a less obvious impact on community stability with resulting public health outcomes. For African American and Latino communities shouldering the greatest burden of HIV, viral hepatitis, and sexually transmitted infections, the relationship between general population health and inmate health is complex and increasingly fluid.

Expanding Community

Perhaps in no other developed economy is the link between HIV infection, incarceration and social inequities as salient as in the United States. Yet it is unclear whether correctional facilities are amplifying HIV and other infectious diseases or the facilities are reservoirs of previously infected people(12). Those populations that have been shown to benefit least from modern antiretroviral (ARV) therapies and shoulder the greatest burden of preventable diseases in community settings—racial minorities, homeless and marginally housed, injection drug users, the mentally ill, persons with low education levels, those of lower socioeconomic status—represent an overwhelming majority of the incarcerated population in the United States(13, 14). What is clear is that mass incarceration and high recidivism rates are adding to the accumulation of disadvantage by destabilizing communities, their sexual networks, and increasing infectious disease risks.

Among the African American and Latino communities impacted by what are now tandem epidemics of HIV and mass incarceration and the associated phenomena of “churning” individuals between the general and incarcerated populations expands the very notion of what constitutes a “community.” Incarcerated populations can no longer be viewed in isolation. Prison health is an inextricable component of community health for our most vulnerable communities and the resulting public health planning must include incarcerated populations.

Epidemiology of HIV, HBV, HCV

An estimated one quarter of all HIV infected individuals(15, 16), 12-15% of those with chronic hepatitis B virus (HBV) and 39% with chronic hepatitis C virus (HCV) in the United States pass through or are released from State or Federal correctional facilities annually(17). As many as 35% of Americans with active tuberculosis spent time in a correctional facility(18). The prevalence of confirmed AIDS among inmates is 4 times higher(19) and the estimated prevalence of HIV among incarcerated populations is nearly 5 times higher than the general U.S population(19). The overall HIV prevalence in state and federal prisons is approximately 1.8%, but there are significant state and regional differences in prevalence rates. Jail and prison inmates represent approximately 9% of all HIV infected people in the United States(19, 20).

The Northeast region has the highest overall state prison HIV prevalence at 4.0%, largely due to New York which has a 7.0% prevalence rate. The U.S. South has the second highest state prison prevalence at 2.1%, followed by the Midwest region (0.9%), then the West region (0.7%). Although regional prevalence rates among inmates generally reflect prevalence among the general population of that region, prevalence rates can be misleading insofar as many of the States with low prevalence are due to high overall incarceration rates. California (West region), for example has the fourth highest overall inmate HIV cases in the United States (1,212 cases in 2004). The states with the highest proportion of HIV cases are New York (4,500), Florida (3,250), Texas (2,405), California (1,212) and Georgia (1,109)(19).

Published evidence suggests that most HIV and HCV infections among inmates occur prior to incarceration in community settings(21-23). However, significant speculation that prisons may serve as an amplifying reservoir for infectious diseases exists. It is thought that high risk sexual behavior, the lack of condoms, and drug use within prisons could result in high incidence rates. Because of these concerns and the rapid cycling of community members through the cycle of incarceration and release, former inmates returning to communities are thought to pose a potential public health threat. Studying male inmates in Rhode Island, Grace Macalino and colleagues demonstrated that while concerns over HIV and HCV infection amplification in prisons may be overstated, HBV transmission was significantly higher than in the general population (22). Nevertheless, HIV transmission does occur in prisons and a growing body of recent evidence suggests intra-prison transmission is a significant public health factor, although to a lesser extent than transmission in community settings. A study conducted among male inmates in the Georgia Department of Corrections (GDC) found that 88 inmates with known negative HIV status at admission seroconverted while incarcerated(24). The study positively associated the following factors with seroconversion: male-male sex in prison, tattooing in prison, black race, and having a body mass index (BMI) of <25.4 kg/m² on entry into prison. The investigators also conducted a case control study to identify demographic factors and risk behaviors. Of 54 (GDC) inmates reporting male-male sex while in prison, consensual sex, exchange sex (sex for money, food, or cigarettes), and rape were reported. Thirty percent of those engaging in consensual sex reported using condoms or other improvised barriers, while only 21% of those engaging in exchange sex reported utilizing barriers, and no barriers were used among those reporting rape.

Coercive and Consensual Sex

Despite its prohibition in all U.S. States, both coercive and consensual sexual activity between inmates occurs(25-27). Conservative estimates on inmates who engage in sexual intercourse range from 2%-44%(25, 28-31). Periodic outbreaks of sexually transmitted diseases in correctional facilities provide additional evidence of sexual activity(32, 33). For consensual sex or exchange-sex (sex for valuables or protection), the threat of a felony conviction for participating in sexual intercourse creates significant difficulties in documenting sex between inmates and the nature of the interaction. Although a paucity of empirical studies exist, sexual assault during incarceration is documented(26, 29-31, 34, 35) and supported by over 40 years of credible evidence(36). The NGO, Stop Prisoner Rape asserts, "...prisoner rape is arguably the most widespread and neglected form of human rights abuse in the U.S. today(37)." Until the passage of the Prison Rape Elimination Act of 2003 which mandates the collection of national data on incidence of prisoner rape, the lack of empirical data has hampered efforts to establish effective prevention policies and gauge the prison health impact.

For over a decade, the World Health Organization (WHO) and the Joint United Nations Program on HIV/AIDS (UNAIDS) have recommended that condoms be made available in prisons. In the United States, few correctional facilities provide condoms, as they are considered contraband. Limited distribution of condoms to some inmates exists in state prisons of Mississippi and Vermont and jails in Los Angeles, New York, Philadelphia, San Francisco, and the District of Columbia. These programs, along with recently available survey data, suggest wide acceptability for condom distribution among inmates and correctional staff.

Testing/Surveillance

Surveillance of HIV transmission in correctional facilities is further complicated by inconsistent testing policies, despite CDC recommendations and guidance for routine HIV testing in correctional facilities. As of 2004, only 20 states test all inmates upon prison admission, the Federal Bureau of Prisons (FBP) does not. Only three states test all inmates upon release. Forty-eight states and the FBP test inmates if they have HIV-related symptoms or at the request of an inmate. Forty-one states and FBP test inmates if they are involved in an exposure risk. Seventeen states and the FBP test inmates that belong to "high-risk" groups(19). The inconsistent testing policies severely limit surveillance of HIV transmission within the prison system as well as hampering efforts to develop community reentry services that monitor and support positive health for HIV infected former inmates. Routine voluntary opt-out testing and counseling in compliance with the CDC's recommendations for HIV screening as part of standard medical care should be advocated and made consistent across both state and federal prisons and the local jail systems. Due to the rapid turnover of jail inmates, voluntary opt-out rapid testing services should be made available at all facilities. HIV screening using rapid testing and counseling has been demonstrated to be feasible in jails and as effective as traditional HIV counseling and testing(38, 39). Early and routine HIV testing not only benefits inmates and correctional facilities by linking positive HIV inmates to care early, reducing transmission risk among inmates and correctional staff, and reducing medical costs associated with delayed care—testing of inmates has a direct impact on the general population as most inmates will eventually be released. Furthermore, states like Rhode Island that have had mandatory testing of all inmates upon admission since 1989 have identified one-third of the entire states HIV infected population in its prisons(40).

Upon admission inmates lose the right to most private health care and public health entitlement programs (i.e., Medicaid) and the responsibility of health care for inmates is transferred to the correctional facility or in some cases the local public health system. In 1976, the U.S. Supreme Court affirmed an inmate's constitutional right to the same standard of care and medical services as the general population. As the CDC promotes its recommendations for voluntary opt-out testing as part of the general population's standard medical care, these recommendations should also be adopted as the minimum standard of care in all correctional facilities.

Core Communities

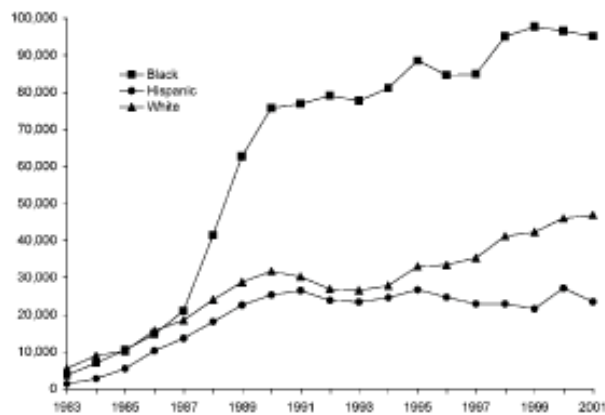
Prisoners are disproportionately selected from and released to a small number of "core" counties(1, 41). In these communities the estimated one-day incarceration rate is significantly higher than the general population, and even more pronounced for African American males. For example, almost 3/4 of New York state prison population comes from seven New York City neighborhoods. Both the sheer volume and concentration of persons returning from prison has dramatically increased over the past three decades(41). Another study noted 11 percent of the city blocks in Brooklyn, New York accounted for 20 percent of the Brooklyn population, but this same area accounted for 50 percent of the cities parolees(8). These same core communities have high numbers of persons that repeatedly churn back and forth between prison and the community, frequently for technical parole violations. As the U.S. prison population grows, more prisoners return to their communities after serving their sentences (>90%), most in under 2 1/2 years. The social character of these communities is heavily impacted by the churning of inmates repeatedly between prison and their communities, by further destabilizing the social forces that oppose this cycle. From a public health and HIV prevention perspective, these communities require concerted attention since most HIV positive inmates were infected prior to incarceration. For HIV positive individuals that were on stable ARV therapy while incarcerated, in the absence of social and medical network of support, return to these communities is predictive of disrupted treatment, virologic failure, higher morbidity, and poses a public health threat. These communities are important areas for health-related, housing, and mental health discharge services.

Race Neutral Policies/Disparate Impact

But why has the increase in overall incarceration overwhelmingly affected African Americans? What are the social and health impacts on the communities and families to which they return? Many social scientists and criminologists have noted that the rapid increase in the incarceration rate, particularly for African Americans, is less a function of underlying behavioral changes that are reflected in criminal offending patterns, than a result of policy changes(42-44). Beginning in the 1970s and gaining momentum in the 1980s and 90s, policy makers enacted a series of sentencing policies that incarcerate more people for longer periods of time and, more importantly, extended their punitive reach to greatly expand collateral sanctions that impose serious obstacles to community re-entry and success(45). Over the past two decades, persons convicted of felony offenses are more likely to be sentenced to prison terms, mandatory minimum sentencing, "truth in sentencing", and the "three strikes and you're out" laws have all contributed to the rapid growth of the prison population. The most dramatic of these policies was related to the federal government's "get tough on drug use" sentiment of the 1980's.

In 1986, the Regan administration declared a war on drugs in response to a media-driven public frenzy that crack cocaine was devastating communities after the drug related death of University of Maryland basketball star Len Bias. The administration passed the “Anti-Drug Abuse Act of 1986” which although on the surface appeared to be race neutral, had a devastating disparate impact on African Americans.

The 1986 Act established, among other things, mandatory minimum sentences for specific quantities of cocaine – but significantly harsher punishment for smaller amounts of crack cocaine. Distribution of five grams of crack cocaine carried a minimum 5-year federal prison sentence, while 500 grams of powder cocaine—100 times the amount of crack—carried the same sentence and created the 100:1 sentencing disparity. The law was intended to punish what congress believed were serious drug traffickers. In 1988, just two years later, when drug related crimes were still on the rise, congress intensified its war by passing the Omnibus Anti-Drug Abuse Act which stipulated that the mere possession of 5 grams of crack cocaine would result in 5 year minimum sentences(46).



Number of reported admission to prison for a drug offense, by race/ethnicity. Source: Iguchi et al. 2002

The American Civil Liberties Union (ACLU) reports that African Americans comprise the vast majority of convictions for crack cocaine while the majority of powder cocaine convictions are white – this is true despite the fact that whites and Latinos make up the majority of crack users(46). In 2003, African Americans accounted for 80% of those sentenced under crack cocaine laws, while whites only accounted for 7.8%(47), despite the fact the more than 66% of crack users are white or Latino(48).

The war on drugs has impacted minority women, particularly African American women, more severely than men. Two thirds of women parolees are minorities and nearly half were convicted of drug offences. Between 1986 and 1996 the number of women incarcerated for drug crimes had risen by 888%(49).

Community Reentry – the acute period of risk

The period immediately following release from prison is a critical time for health and social service interventions(50). Upon release to communities, relapse to high-risk behavior occurs rapidly. The rapid progression presents both a general public health risk and a risk to inmates as high prison recidivism rates shortly after release are well documented. Although many return to prison for technical violations of parole, new crimes are also a factor. As time from release increases, recidivism probability decreases—presumably requiring less monitoring and fewer support services. The period immediately following release also has substantial health and mortality risks. One study based on former inmates in Washington State demonstrated that

within the first two weeks after release, former inmates had a risk of death rate that was almost 13 times greater than the general population and that even after 9 weeks post-release mortality rates did not return to the general population baseline(51).

When comparing HIV-related virologic outcomes between similar demographic groups of incarcerated and general population, virologic outcomes among inmates have been demonstrated to be better. Several studies among inmates living with HIV have reported 50%-60% of their cohorts achieving undetectable viral loads (<400 copies/ml) (52, 53)—a rate that is at least as good, if not better than, that achieved in many community clinic that serve similar populations. The period immediately following release is associated with a rapid deleterious effect on viral suppression, lower CD4+ T cell counts, and accelerated disease progression. Another study that followed recidivist women reported very high HBV and HCV seroconversion rates of 12.2 and 18.2 per 100 person-years, respectively, indicating high-risk behavior upon return to communities(21). Taken together, these data suggest a critical need for vigilant health surveillance and services that ensure continuity of care in the period immediately following release. Risk reduction interventions for sexually transmitted diseases and viral hepatitis should begin in the prerelease period—months or weeks prior to release—and should continue through the release date. Overall, in the weeks immediately following release from prison, discharge services should provide comprehensive support services that not only connect former inmates to housing, employment, and social services but also monitor their health status. This is particularly important for former inmates living with HIV. In most cases, the current parole system does little more than monitor adherence to parole and technical violations.

Although both Direct Observation Therapy (DOT) and to a lesser extent, inmate self administered therapy (SAT) strategies are employed for the provision of ARV therapy to inmates, DOT has been widely promoted and is the predominate ARV delivery strategy in many prisons(54). Although DOT among inmates has been demonstrated to reduce viral loads to undetectable levels, there is some debate of the strategy's ability to promote greater than 90% adherence(55), which is believed to be required to maintain durable viral suppression(56, 57). Structured DOT programs in prisons may paradoxically influence poor ARV adherence in the community setting as ex-inmates will be required to rapidly change to self administered therapy (except in rare circumstances) once released. One study, conducted among HIV positive inmates in the San Francisco Jail system randomized to either a Keep on Person (KOP) with self administered ART arm or a DOT ART arm is finding that KOP is more popular among jail participants and adherence while incarcerated appears as good if not better than the DOT arm because doses are not missed when at court or in special hearings(58). Differences between the types of adherence disruptions experienced by shorter term periods in jail as opposed to longer prison terms may change SAT adherence profiles and similar results may not apply to prisons. Additionally, those that successfully participated in SAT programs while in prison or jail may not have continued positive benefit during community reentry. Nevertheless, DOT programs are expensive to maintain in community settings and may only have limited application for short durations of time.

Community Tipping Points, Accumulation of Disadvantage, and HIV

The impact of nearly 600,000 people annually returning from prison to their communities and families is far reaching. Most will return to core communities with the stigma of being an ex-

felon, poor employment prospects, little education, poor health, and many with untreated drug and alcohol problems. Incarceration disrupts family relationships and social and sexual networks which has been repeatedly demonstrated to be predictive of higher-risk behaviors and increased probability of recidivism(59). The sheer volume of this population cycling through core communities changes the social and public health character of the population in these areas.

For women, poor employment prospects and lack of income increase probability of participating in higher-risk behavior and decreasing ability of negotiating condom use(60). The ability to negotiate condom use is particularly important as low utilization rates by male inmates and their primary partners before and after incarceration is well documented(12). Economic vulnerability also increases probability of “exchange sex”—sex for personal or family support.

Lack of sustainable income whether through employment or public entitlements has been demonstrated to decrease retention in drug treatment programs(61) and increase HIV-risk behavior like needle sharing(62, 63). Ironically, the fear of violating probation or parole may be a deterrent for accessing available community harm reduction programs like needle-exchanges(64).

The impact of mass incarceration on the accumulation of labor market disadvantage and the resulting relationship to recidivism and high risk behavior can not be understated. Removing large numbers of young African American and Latino men during their 20’s and 30’s, typically when other groups experience strong earning growth and employment networking, has a punctuating effect on their transition to stable career employment(65). The added stigma of being an ex-felon further diminishes prospects for entry-level positions and encourages participation in criminal income generation.

High incarceration rates also have aggregate negative social consequences on the communities from which inmates come. Clear et al, studying high incarceration neighborhoods in Tallahassee Florida demonstrated that once a tipping point has been reached, the effects of mass incarceration has a ubiquitous character and no longer reduces crime, but in fact increase it(66) and the social disorganization of the community(67). In a similar way, the prevalence of sexually transmitted diseases within these communities is influenced by the disruption of social and sexual networks when large numbers of the population are intermittently removed.

Conclusion and Recommendations

Among the populations affected by the tandem epidemics of HIV and mass incarceration, the public health distinction between community and incarcerated populations is increasingly difficult to make and may be counterproductive. For these populations, community health planning should encompass inmate health. Reentry planning and discharge services—particularly health care—must be part of comprehensive public health planning that recognizes inmates and ex-offenders as integral community members. It may be counterintuitive to many that although prevalence of infectious disease is higher among incarcerated populations and HIV and viral hepatitis transmission do occur in prisons, greater amplification of these diseases likely occurs in the general population to which inmates return. Positive health outcomes for HIV infected persons while incarcerated that are quickly lost upon release to the general population represents a critical failure in reentry planning and care.

Comprehensive overhaul of every aspect of the United States incarceration system and the community reentry process is desperately needed. Extensive progress has been made in identifying failures and outlining recommendations for reform by the Re-Entry Policy Council <http://www.reentrypolicy.org/> a public-private partnership (68). The recommendations we list below are intended to highlight efforts specific to corrective HIV and public health trajectories.

Recommendation: Develop Comprehensive Prisoner Health Intake Strategy

Upon admission, each new inmate should have a comprehensive plan for health developed. This intake process should be uniform across Jails and Prisons. The plan should include assessment and planning for substance abuse, mental health, and infectious disease harm reduction. The intake process should be coordinated with community-based health care providers that will ultimately care for inmates as they reenter their communities. For HIV positive inmates, monitoring viral suppression and immune reconstitution should comply with the current CDC guidelines that recommend patients have their CD4+ T-cell counts measured every 3 to 6 months, and viral load levels measured every 3 to 4 months while on stable antiretroviral therapy. For inmates living with HIV, extensive discharge counseling and a structured plan for establishing routine access to healthcare, adherence to medications, and reinstatement of entitlement programs (Medicaid) should began while incarcerated.

Recommendation: Establish National Standards for Routine Opt-Out HIV Testing

As of 2004, 18 states test all inmates at admission and to state prisons and 2 test at some time during incarceration. Only 3 states test upon release. As of April 19, 2007 representative Maxine Waters (D-CA) introduced the “Stop AIDS in Prison Act of 2007” (HR 1943) which calls on the Federal Bureau of Prisons to enact policies that will provide routine opt-out counseling and testing as part of comprehensive medical exam upon admission, upon request, and prior to community re-entry (<http://www.govtrack.us/congress/bill.xpd?bill=h110-1943>). For states that do not have mandatory testing, voluntary opt-out testing on admission and release should be recommended. All states should incorporate annual voluntary opt-out testing for all inmates as part of regular health monitoring.

Recommendation: Provide Support for Prison Health Programs and Higher Education in Prison

In 1994, the Violent Crime Control and Law Enforcement Act barred all prisoners in the U.S. from receiving Pell Grants – the need-based federal grant program which had been the primary source of funding for prison higher education programs. Over 300 prison higher education programs existed in the late 1980’s, but by 1996 only 10 programs continued. Higher education in prison is strongly associated with reduced recidivism rates and improved probability of successful re-entry into society. Although no direct evidence exist linking prison higher education programs to improved health outcomes, higher education in the general population is strongly correlated to better health and reduced risk of disease. In the absence of federal support, prison higher education programs present a strong opportunity for philanthropic investment.

Recommendation: Special Programming Emphasis on “Core” Communities

A large percentage of prisoners are released to a small number of core communities. The social and public health character of these communities is heavily impacted by the churning of inmates

between prison and community that has the net effect of destabilizing the social forces that oppose this cycle. From public health and HIV prevention prospective, these communities require particularly concerted attention since most HIV positive inmates get infected prior to incarceration. Furthermore, condom use prior to incarceration and upon release is known to be low. Resources for HIV prevention should be directed at core communities.

Recommendation: Focus on the Acute Period Immediately Following Release

For HIV positive inmates, the period immediately following release should provide frequent, comprehensive and integrated healthcare and social support services. The period immediately following release from prison is a critical time for health and social service interventions. High prison recidivism rates shortly after release are well documented. The period immediately following release also has substantial health risks and mortality. It is associated with deleterious effect on viral suppression, lower CD4+ T cell counts, and accelerated disease progression. Taken together, these data suggest a critical need for vigilant health surveillance and services that ensure continuity of care as former inmates re-enter their communities.

Recommendation: Programs That Make Condoms Readily Available In Prisons and Jails

Coercive and consensual sexual activity in prisons and jails occurs among inmates and between inmates and guards despite being prohibited in all states. For over a decade, the World Health Organization (WHO) and the Joint United Nations Program on HIV/AIDS (UNAIDS) have recommended that condoms are made available in prisons. In the United States, few correctional facilities provide condoms as they are considered contraband. Limited distribution of condoms to some inmates exists in state prisons in Mississippi and Vermont and jails in Los Angeles, New York, Philadelphia, San Francisco, and the District of Columbia. These programs, along with recently available survey data, suggest wide acceptability for condom distribution among inmates and correctional staff. Programs that make condoms widely available in correctional facilities should be lobbied and developed. Jails in particular are in urgent need of condom distribution and other harm reduction measures as rapid population turnover makes identification, surveillance and care of STIs challenging.

Recommendation: Establish Standards so that Prisons and Jails are free of Sexual Coercion and Rape

In accordance with the provisions of the Prison Rape Elimination Act of 2003, standards should be established with the goal of elimination of rape and sexual coercions in detention facilities. Mental and physical health services should be provided to victims. Protection for victims and those at risk of victimization that does not impose additional punitive harm (e.g., solitary confinement) should be provided. In cases of HIV and blood-borne pathogen exposure, post-exposure prophylaxis should be provided.

Recommendation: Support Needle Exchange and other Harm Reduction Programming in Communities with High Incarceration Rates

Injection drug use puts individuals at substantially greater risk of HIV infection. Needle exchange programs have been repeatedly proven to reduce HIV transmission and are endorsed by the WHO and UNAIDS. Although it is unlikely U.S. law makers will allow needle exchange in detention facilities, several States are now supporting needle exchange programs among the general population. Because, injection drug users represent a significant proportion of the U.S.

incarcerated population and will likely be released after serving relatively short sentences, community-based needle exchange programming reduces public health risk. Ideally substance abuse programming would be during incarceration and persons known to be at-risk would be connected to community based programs on release.

Recommendation: Specific Programming That Targets Incarceration and HIV among African American Communities Should Be Developed

Mass incarceration and HIV are now tandem epidemics among African Americans. In the United States, African Americans as compared to other groups, have the highest rates of incarceration and recidivism as well as the highest lifetime probability of being incarcerated. HIV prevalence is also considerably higher among African Americans than other racial or ethnic groups. Evidence suggests that sexual networking patterns among some African American groups are dense and unique; there is a higher likelihood among African Americans that there will be dissortative mixing of groups with differing HIV risk profiles in sexual partner choice. Combined with the evidence that most inmates living with HIV acquired the infection outside of prison and most inmates return to core communities, the incarceration-release cycle presents greater public health risks to some African American communities. Furthermore, differential sentencing for non-violent drug offenses (particularly crack cocaine) has had devastating impact on African Americans. Interventions that focus on African Americans should be tailored to: a) geographic location and urban/rural setting; b) community setting; c) sexual orientation; d) gender. Interventions must be integrated with discharge services for employment, housing, family support, education, and mental health—all factors associated with both poor health outcomes and recidivism. Organizations lobbying policymakers regarding the failed drug policy and its public health and social impact on minority communities should be supported

Recommendation: Develop Comprehensive Service Initiative that Focuses on Health and Social Impacts of Incarceration in the Southern United States

Although the highest overall prisoner populations are in California, Texas, Florida, and New York, the 5 states with the highest incarceration rates per 100,000 residents are all in the Southern United States—Louisiana, Texas, Mississippi, Oklahoma and Alabama. The Southern United States also has some of the nation's highest incidence HIV rates, and a rapidly growing heterosexually transmitted epidemic that is increasingly concentrated among African Americans. Furthermore, according to the National Health Foundation, 9 of the 10 states with the worst overall health profiles are in the South. Low educational attainment and high poverty levels—both strong predictors of higher incarceration probability—are pervasive throughout the South.

1. Western B, Kling J, Weiman D. The Labor Market Consequences of Incarceration. *Crime & Delinquency*. 2001 July;47(3):410-27.
2. Bureau of Justice Statistics USDoJ. Corrections Statistics. 2005 [cited 2007 June 1]; Available from: <http://www.ojp.usdoj.gov/bjs/correct.htm#findings>
3. Sabol WJ MT, Harrison PM. Prison and Jail Inmates at Midyear 2006. 2006 [cited; Available from: <http://www.ojp.usdoj.gov/bjs/pubalp2.htm#P>
4. Bonczar T. Prevalence of Imprisonment in the U.S. Population, 1974-2001. 2003 [cited 2007 June 10]; Available from: <http://www.ojp.usdoj.gov/bjs/pub/pdf/piusp01.pdf>

5. Harrison P, Beck A. Prisoners in 2005. 2005 [cited 2007 June 10]; Available from: <http://www.ojp.usdoj.gov/bjs/pub/pdf/p05.pdf>
6. Comparative International Rates of Incarceration: An Examination of Causes and Trends. [cited 2007 May 1]; Available from: <http://www.sentencingproject.org/PublicationDetails.aspx?PublicationID=423>. 2003.
7. Bureau of Justice Statistics USDoJ. Criminal Offenders Statistics. 2001 [cited 2007 June 1]; Available from: <http://www.ojp.usdoj.gov/bjs/crimoff.htm#prevalence>
8. Petersilia A. When Prisoners Come Home: Parole and Prisoner Reentry. New York: Oxford University Press; 2003.
9. Iguchi M, Bell J, Ramchand R, Fain T. How Criminal System Racial Disparities May Translate into Health Disparities. *Journal of Health Care for the Poor and Underserved*. 2005;16:48-56.
10. Allard P. Life Sentences: Denying Welfare Benefits to Women Convicted of Drug Offences. Washington, D.C.: Sentencing Project; 2002.
11. Langan A, Levin D. Recidivism of Prisoners Released in 1994. 2002 [cited 2007 June 11]; Available from: <http://www.ojp.usdoj.gov/bjs/pub/pdf/rpr94.pdf>
12. Grinstead OA, Faigeles B, Comfort M, Seal D, Nealey-Moore J, Belcher L, et al. HIV, STD, and hepatitis risk to primary female partners of men being released from prison. *Women & health*. 2005;41(2):63-80.
13. Buka SL. Disparities in health status and substance use: ethnicity and socioeconomic factors. *Public Health Rep*. 2002;117 Suppl 1:S118-25.
14. Farinpour R, Miller EN, Satz P, Selnes OA, Cohen BA, Becker JT, et al. Psychosocial risk factors of HIV morbidity and mortality: findings from the Multicenter AIDS Cohort Study (MACS). *J Clin Exp Neuropsychol*. 2003 Aug;25(5):654-70.
15. Hammett TM, Harmon MP, Rhodes W. The burden of infectious disease among inmates of and releasees from US correctional facilities, 1997. *American journal of public health*. 2002 Nov;92(11):1789-94.
16. Hammett TM. HIV/AIDS and other infectious diseases among correctional inmates: transmission, burden, and an appropriate response. *American journal of public health*. 2006 Jun;96(6):974-8.
17. Weinbaum C, Lyerla R, Margolis HS. Prevention and control of infections with hepatitis viruses in correctional settings. Centers for Disease Control and Prevention. *MMWR Recomm Rep*. 2003 Jan 24;52(RR-1):1-36; quiz CE1-4.
18. National Commission on Correctional Health Care. *The Health Status of Soon-to-Be-Released Inmates*. Washington D.C.: National Institute of Justice; 2002.
19. Maruschak L. *HIV in Prisons, 2004*. Washington, DC: U.S. Department of Justice, Office of Justice Programs; 2006 November.
20. Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report, 2005*. Vol 17. Rev ed. Atlanta: Department of Health and Human Services, Centers for Disease Control and Prevention; 2007.
21. Macalino GE, Vlahov D, Dickinson BP, Schwartzapfel B, Rich JD. Community incidence of hepatitis B and C among reincarcerated women. *Clin Infect Dis*. 2005 Oct 1;41(7):998-1002.
22. Macalino GE, Vlahov D, Sanford-Colby S, Patel S, Sabin K, Salas C, et al. Prevalence and incidence of HIV, hepatitis B virus, and hepatitis C virus infections among males in Rhode Island prisons. *American journal of public health*. 2004 Jul;94(7):1218-23.

23. Spaulding A, Stephenson B, Macalino G, Ruby W, Clarke JG, Flanigan TP. Human immunodeficiency virus in correctional facilities: a review. *Clin Infect Dis.* 2002 Aug 1;35(3):305-12.
24. HIV transmission among male inmates in a state prison system--Georgia, 1992-2005. *Mmwr.* 2006 Apr 21;55(15):421-6.
25. Krebs C. High-risk HIV Transmission Behavior in Prison and the Prison Subculture. *Prison Journal.* 2002;82(1):19-49.
26. Human Rights Watch. *No Escape: Male Rape in US Prisons*; 2001.
27. Stop Prisoner Rape. *In the Shadows: Sexual Violence in U.S. Detention Facilities.* 2006 [cited 2007 April 15]; Available from: http://www.spr.org/pdf/in_the_shadows.pdf
28. Saum C, Surratt H, Inciardi J, Bennette R. Sex In Prison: exploring the myths and realities. *The Prison Journal.* 1995;75:413-30.
29. Struckman-Johnson C, Struckman-Johnson D. A comparison of sexual coercion experiences reported by men and women in prison. *Journal of interpersonal violence.* 2006 Dec;21(12):1591-615.
30. Struckman-Johnson C, Struckman-Johnson D. Sexual coercion reported by women in three midwestern prisons. *Journal of sex research.* 2002 Aug;39(3):217-27.
31. Struckman-Johnson C, Struckman-Johnson D. Sexual Coercion Rates in Seven Midwestern Prison Facilities for Men. *The Prison Journal.* 2000;80(4):379-90.
32. Decker MD, Vaughn WK, Brodie JS, Hutcheson RH, Jr., Schaffner W. The incidence of hepatitis B in Tennessee prisoners. *The Journal of infectious diseases.* 1985 Jul;152(1):214-7.
33. Wolfe MI, Xu F, Patel P, O'Cain M, Schillinger JA, St Louis ME, et al. An outbreak of syphilis in Alabama prisons: correctional health policy and communicable disease control. *American journal of public health.* 2001 Aug;91(8):1220-5.
34. Beck A, Hughes T. *Prison Rape Elimination Act of 2003: Sexual Violence Reported by Correctional Authorities, 2004.* 2005 [cited 2007 June 10]; Available from: <http://www.ojp.usdoj.gov/bjs/pub/pdf/svrca04.pdf>
35. Austin J, Fabelo T, Gunter A, McGinnis K. *Sexual Violence In The Texas Prison System.* Research Report Submitted to U.S Department of Justice Report has not been published by Department. . Washington D.C.: The JFA Institute; 2006 March 2006.
36. Dumond R. The Impact of Prisoner Sexual Violence: Challenges of Implementing Public Law 108-79--The Prison Elimination Act of 2003. *Journal of Legislation.* 2006;32(142).
37. Stop Prisoner Rape. *Stories from Inside: Prisoner Rape and the War on Drugs.* 2007 [cited 2007 June 15]; Available from: <http://www.spr.org/pdf/StoriesFromInside032207.pdf>
38. Beckwith CG, Atunah-Jay S, Cohen J, Macalino G, Poshkus M, Rich JD, et al. Feasibility and acceptability of rapid HIV testing in jail. *AIDS patient care and STDs.* 2007 Jan;21(1):41-7.
39. Metcalf CA, Douglas JM, Jr., Malotte CK, Cross H, Dillon BA, Paul SM, et al. Relative efficacy of prevention counseling with rapid and standard HIV testing: a randomized, controlled trial (RESPECT-2). *Sexually transmitted diseases.* 2005 Feb;32(2):130-8.
40. Desai AA, Latta ET, Spaulding A, Rich JD, Flanigan TP. The importance of routine HIV testing in the incarcerated population: the Rhode Island experience. *AIDS Educ Prev.* 2002 Oct;14(5 Suppl B):45-52.
41. Lynch J, Sabol W. *Prisoner Reentry in Perspective.* Washington D.C.: Urban Institute; 2001.

42. Mauer M. *Race to Incarcerate*. New York: New Press; Rev. Upd edition 2006.
43. Mauer M. *Comparative International Rates of Incarceration: An Examination of Causes and Trends*. 2003 [cited 2007 May 1]; Available from: <http://www.sentencingproject.org/PublicationDetails.aspx?PublicationID=423>
44. Blumstein A, Beck A. *Population Growth in Prisons, 1980-1996*. In: Tonry M, Petersilia J, editors. *Prisons: Crime and Justice - A review of Research*. Chicago: University of Chicago Press; 1999. p. 17-61.
45. Mauer M. *Thinking About Prison and its Impact in the Twenty-First Century*. *Ohio State Journal of Criminal Law*. 2004;2:607-18.
46. Vagins D, McCurdy J. *Cracks in the System: Twenty Years of the Unjust Federal Crack Cocaine Law*. Washington D.C.: American Civil Liberties Union; 2006.
47. U.S. Sentencing Commission. *2003 Sourcebook of Federal Sentencing*; 2003.
48. Substance Abuse and Mental Health Services Administration. *2004 National Survey on Drug Use and Health, Population Estimates 1995*. Washington D.C.; 2005.
49. Mauer M, Potler K, Wolf R. *Gender and Justice: Women, Drugs and Sentencing Policy*. Washington D.C.: Sentencing Project; 1999.
50. Rich JD, Holmes L, Salas C, Macalino G, Davis D, Ryczek J, et al. Successful linkage of medical care and community services for HIV-positive offenders being released from prison. *J Urban Health*. 2001 Jun;78(2):279-89.
51. Binswanger IA, Stern MF, Deyo RA, Heagerty PJ, Cheadle A, Elmore JG, et al. Release from prison--a high risk of death for former inmates. *The New England journal of medicine*. 2007 Jan 11;356(2):157-65.
52. Springer SA, Pesanti E, Hodges J, Macura T, Doros G, Altice FL. Effectiveness of antiretroviral therapy among HIV-infected prisoners: reincarceration and the lack of sustained benefit after release to the community. *Clin Infect Dis*. 2004 Jun 15;38(12):1754-60.
53. Stephenson BL, Wohl DA, Golin CE, Tien HC, Stewart P, Kaplan AH. Effect of release from prison and re-incarceration on the viral loads of HIV-infected individuals. *Public Health Rep*. 2005 Jan-Feb;120(1):84-8.
54. Babudieri S, Aceti A, D'Offizi GP, Carbonara S, Starnini G. Directly observed therapy to treat HIV infection in prisoners. *Jama*. 2000 Jul 12;284(2):179-80.
55. Wohl DA, Stephenson BL, Golin CE, Kiziah CN, Rosen D, Ngo B, et al. Adherence to directly observed antiretroviral therapy among human immunodeficiency virus-infected prison inmates. *Clin Infect Dis*. 2003 Jun 15;36(12):1572-6.
56. Bangsberg DR, Hecht FM, Charlebois ED, Zolopa AR, Holodniy M, Sheiner L, et al. Adherence to protease inhibitors, HIV-1 viral load, and development of drug resistance in an indigent population. *AIDS (London, England)*. 2000 Mar 10;14(4):357-66.
57. Paterson DL, Swindells S, Mohr J, Brester M, Vergis EN, Squier C, et al. Adherence to protease inhibitor therapy and outcomes in patients with HIV infection. *Annals of internal medicine*. 2000 Jul 4;133(1):21-30.
58. Tulskey J. email communication, I AM Study. 2007.
59. Hoffman J, Su S, Pach A. Changes in Network Characteristics and HIV Risk Behaviors Among Injection Drug Users. *Drug Alcohol Depend*. 1997;46(1):41-51.
60. Hankins C. Sexual transmission of HIV to women in industrialized countries. *World health statistics quarterly*. 1996;49(2):106-14.

61. Grella CE, Anglin MD, Wugalter SE, Rawson R, Hasson A. Reasons for discharge from methadone maintenance for addicts at high risk of HIV infection or transmission. *Journal of psychoactive drugs*. 1994 Apr-Jun;26(2):223-32.
62. Andia JF, Deren S, Kang SY, Robles RR, Colon HM, Oliver-Velez D, et al. Residential status and HIV risk behaviors among Puerto Rican drug injectors in New York and Puerto Rico. *The American journal of drug and alcohol abuse*. 2001 Nov;27(4):719-35.
63. Beardsley M, Deren S, Tortu S, Goldstein MF, Ziek K, Hamid R. Trends in injection risk behaviors in a sample of New York City injection drug users: 1992-1995. *J Acquir Immune Defic Syndr Hum Retrovirol*. 1999 Mar 1;20(3):283-9.
64. Cohen J. Injecting Reason: Human Rights and HIV Prevention for Injection Drug Users. 2003;15(2).
65. Western B, Pettit B. Incarceration and Racial Inequality in Men's Employment. *Industrial and Labor Relations Review*. 2000;54:3-16.
66. Clear T, Rose D, Waring E, Scully K. Coercive Mobility and Crime: A Preliminary Examination of Concentrated Incarceration and Social Disorganization. *Justice Quarterly*. 2003;20(1):33-64.
67. Rose D, Clear T. Incarceration, Social Capital, and Crime: Implications for Social Disorganization Theory. *Criminology*. 1998;36:331-480.
68. Re-Entry Policy Council. Report of the Re-Entry Policy Council: Charting the Safe and Successful Return of Prisoners to the Community. New York: Council of State Governments; 2005 January.