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Center for Interdisciplinary Research on AIDS
at Yale University

BIBLIOGRAPHY ON CRIMINALIZATION OF HIV NON-DISCLOSURE, EXPOSURE, AND TRANSMISSION

August 2018

**Center for Interdisciplinary Research on AIDS
Yale University**

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This bibliography is the second update of the annotated bibliography on criminalization of HIV exposure, published in 2012. The bibliography was curated by Dini Harsono, M.Sc., Assistant Director of the Clinical and Health Services Research (CHSR) Core and coordinator of the Criminalization of HIV Exposure Work Group at the Center for Interdisciplinary Research on AIDS (CIRA) at Yale University. The author would like to thank members of the Criminalization of HIV Exposure Work Group for their continuous contribution of time, resources and expertise to the development of this bibliography.

The Criminalization of HIV Exposure Work Group is a multidisciplinary collaboration of policy makers, advocates, researchers, public health officials, and other relevant stakeholders that aims to examine critical public health, ethical, and legal issues around criminalization, discuss the ethical and public health implications of the criminal law, and develop research questions pertaining to criminalization of HIV non-disclosure, exposure and transmission in North America. For more information:

<http://cira.yale.edu/research/workgroups/criminalization-hiv-exposure-work-group>.

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Bibliography on Criminalization of HIV Non-Disclosure, Exposure, And Transmission

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Introduction

Criminal prosecution for HIV non-disclosure, exposure and transmission has been a central discussion topic among people living with HIV, healthcare practitioners, public health officials, and others who work in HIV sectors. More than two-thirds of U.S. states and territories have enacted HIV criminal laws.¹ Globally, the UNAIDS estimated that 61 countries had adopted laws that allow criminalization, while prosecutions for HIV exposure, non-disclosure, and transmission have been reported in at least 49 countries.² The presumptive purpose of the laws is to increase serostatus disclosure to sexual partners, increase HIV-protective behaviors, and ultimately reduce new HIV infections. However, little is known about their effectiveness as an HIV prevention method and the potential negative impacts of the laws.

Since we published the first bibliography on HIV criminalization in 2012,³ literature focused on this topic has grown substantially. The present bibliography systematically highlights the literature consisting of summaries of criminal laws, empirical research, legal and public health analyses, fact sheets and guidance documents, consensus statements, and other relevant references on criminalization in the context of the United States and Canada. The bibliography is by no means exhaustive, nor does it attempt to include every publication focused on criminalization of HIV exposure. Nevertheless, we believe that this document will be a valuable resource for those involved in HIV-related research, care, advocacy and policymaking to identify key articles and documents focused on the complex issues and discussions surrounding HIV criminalization.

Method

Peer-reviewed articles were identified from three databases: PubMed, Scopus and Google Scholar through systematic searches and email alerts. Grey literature was identified through Google searches and reviewing websites of relevant organizations. Additional literature and resources were identified through consultations with members of CIRA's Criminalization of HIV Exposure Work Group.

Results

This document contains 227 references and has been organized according to the following categories:

1. Category 1: contains overview of criminal laws and analyses of case laws (5)
2. Category 2: describes empirical studies on criminalization conducted in the US, Canada, and other countries (126)
3. Category 3: includes legal and public health analyses on criminalization including implications of laws on HIV prevention and care and public health practice (62)
4. Category 4: contains guidance, fact sheets and talking points (19)
5. Category 5: covers policy and consensus statements released by organizations and professional associations calling for an end to the criminalization of HIV and other diseases (8)
6. Category 6: describes other relevant references (e.g., HIV transmission risk, phylogenetics) (7).

Abstracts were directly extracted from the original sources. In the absence of an abstract, an annotation was created to describe the resource document.

¹Lehman JS, Carr MH, Nichol AJ, Ruisanchez A, Knight DW, Langford AE, Gray SC, Mermin JH. Prevalence and public health implications of state laws that criminalize potential HIV exposure in the United States. *AIDS Behav.* 2014;18(6):997-1006. PMC4019819.

²UNAIDS. *The Gap Report*. Geneva, Switzerland: UNAIDS; 2014

³Harsono, Dini. *Criminalization of HIV non-disclosure, exposure, and transmission: Working annotated bibliography*. New Haven, CT: Center for Interdisciplinary Research on AIDS at Yale University; 2012. Available at: <http://cira.yale.edu/node/2081/attachment>.

OVERVIEW OF LAWS AND CASE LAWS

Center for HIV Law and Policy. *HIV criminalization in the United States: a sourcebook on state and federal HIV criminal law and practice.* New York, NY: Center for HIV Law and Policy; 2017. Available at: <http://www.hivlawandpolicy.org/sites/default/files/HIV%20Criminalization%20in%20the%20U.S.%20A%20Sourcebook%20on%20State%20Fed%20HIV%20Criminal%20Law%20and%20Practice%206.26.pdf>.

This resource for lawyers and community advocates outlines punitive laws, policies, and cases affecting people living with HIV (PLHIV) and other communicable diseases in all fifty states, the military, federal prisons, and U.S. territories. It may be used as an aid for attorneys of PLHIV prosecuted for “HIV exposure” or non-disclosure of HIV status, as well as for advocates who want to reform the HIV criminal laws in their state. The HIV Criminalization Sourcebook includes the text, related case law, and analysis of statutory provisions that:

1. criminalize non-disclosure of HIV status or exposure of a third party to HIV;
2. make exceptions to confidentiality and privacy rights of PLHIV;
3. provide for sentence enhancements for PLHIV convicted of underlying crimes such as prostitution and solicitation; and
4. require sex offender registration for PLHIV.

The HIV Criminalization Sourcebook also includes punitive provisions and restrictive measures for people with other sexually transmitted infections (STIs) and communicable diseases. Such provisions may include mandatory testing, quarantine, and isolation.

Center for HIV Law and Policy. *Arrests and prosecutions for HIV exposure in the United States, 2008-2018.* May 2018 ed. New York, NY: Center for HIV Law and Policy; 2018. Available at: <http://www.hivlawandpolicy.org/sites/default/files/Chart%20of%20U.S.%20Arrests%20and%20Prosecutions%20for%20HIV%20Exposure%20in%20the%20United%20States%20%28updated%20May%202018%29.pdf>.

This list, although not exhaustive, provides a broad snapshot of the spate of prosecutions for HIV exposure in the United States from 2008 through May 2018. The vast majority of the prosecutions listed here involves conduct that is either consensual (sex) or poses no significant risk of HIV transmission (spitting, biting). Although the outcomes of some cases remain unknown, the outcomes that are known often involve draconian penalties, including prison sentences that reach 25 years or more, even when no transmission of HIV occurred.

Center for HIV Law and Policy. *State-by-state criminal laws used to prosecute people with HIV.* August 2017 ed. New York, NY: Center for HIV Law and Policy; 2017. Available at: <http://www.hivlawandpolicy.org/sites/default/files/State-by-State%20Chart%20of%20HIV-Specific%20Statutes%20and%20Prosecutorial%20Tools.%20%28final%208%2023%2017%29.pdf>.

This chart catalogues the state laws used to prosecute individuals with HIV. The chart includes which states and territories have HIV-specific criminal statutes, what type of behavior is criminalized, whether there are general STI criminal statutes, whether there is sex offender registration, and whether general felony statutes have been used to prosecute individuals with HIV. First developed in 2013, this resource was updated in August 2017.

Latham SR. *HIV criminalization laws map.* 2013. Available at: <http://legacy.lawatlas.org/query?dataset=hiv-criminalization-statutes>.

This LawAtlas map provides an overview of state laws that criminalize certain actions by people who are HIV-positive based on the presumed risk of HIV transmission. State HIV criminalization laws cover a broad range of behaviors, from biting and scratching to prostitution, and from organ donation and needle sharing to having consensual sex without disclosing one’s HIV status to one’s partner. Some of this criminalization was enacted in HIV-specific state criminal statutes; some has been created via judicial decisions. In some states, HIV status enters into criminal proceedings at the level of sentencing, permitting enhancement of criminal sentences for non-HIV-specific crimes. The data shared in this map, created by Stephen Latham, JD, PhD (Director, Yale Interdisciplinary Center for Bioethics) and Julian Prokopetz (Yale Law ’15), detail the specific conduct criminalized in each state, the means by which criminalization is achieved (by statute, case law, or both), and additional details about any penalties or defenses specified for each crime.

Lehman JS, Carr MH, Nichol AJ, Ruisanchez A, Knight DW, Langford AE, Gray SC, Mermin JH. Prevalence and public health implications of state laws that criminalize potential HIV exposure in the United States. *AIDS Behav.* 2014;18(6):997-1006. PMC4019819.

For the past three decades, legislative approaches to prevent HIV transmission have been used at the national, state, and local levels. One punitive legislative approach has been enactment of laws that criminalize behaviors associated with HIV exposure (HIV-specific criminal laws). In the USA, HIV-specific criminal laws have largely been shaped by state laws. These laws impose criminal penalties on persons who know they have HIV and subsequently engage in certain behaviors, most commonly sexual activity without prior disclosure of HIV-positive serostatus. These laws have been subject to intense public debate. Using public health law research methods, data from the legal database WestlawNext(c) were analyzed to describe the prevalence and characteristics of laws that criminalize potential HIV exposure in the 50 states (plus the District of Columbia) and to examine the implications of these laws for public health practice. The first state laws were enacted in 1986; as of 2011 a total of 67 laws had been enacted in 33 states. By 1995, nearly two-thirds of all laws had been enacted; by 2000, 85 % of laws had been enacted; and since 2000, an additional 10 laws have been enacted. Twenty-four states require persons who are aware that they have HIV to disclose their status to sexual partners and 14 states require disclosure to needle-sharing partners. Twenty-five states criminalize one or more behaviors that pose a low or negligible risk for HIV transmission. Nearly two-thirds of states in the USA have legislation that criminalizes potential HIV exposure. Many of these laws criminalize behaviors that pose low or negligible risk for HIV transmission. The majority of laws were passed before studies showed that antiretroviral therapy (ART) reduces HIV transmission risk and most laws do not account for HIV prevention measures that reduce transmission risk, such as condom use, ART, or pre-exposure prophylaxis. States with HIV-specific criminal laws are encouraged to use the findings of this paper to re-examine those laws, assess the laws' alignment with current evidence regarding HIV transmission risk, and consider whether the laws are the best vehicle to achieve their intended purposes.

EMPIRICAL RESEARCH

Literature Reviews of Empirical Studies

Harsono D, Galletly CL, O'Keefe E, Lazzarini Z. Criminalization of HIV exposure: A review of empirical studies in the United States. *AIDS Behav.* 2017;21(1):27-50. PMC5218970.

This review of literature identifies and describes US empirical studies on the criminalization of HIV exposure, examines findings on key questions about these laws, highlights knowledge gaps, and sets a course for future research. Studies published between 1990 and 2014 were identified through key word searches of relevant electronic databases and discussions with experts. Twenty-five empirical studies were identified. Sixteen of these studies used quantitative methods with more than half of these being cross-sectional survey studies. Study samples included male and female HIV-positive persons, HIV-positive and -negative men who have sex with men, public health personnel, and medical providers. Research questions addressed awareness of and attitudes toward HIV exposure laws, potential influences of these laws on seropositive status disclosure for persons living with HIV, HIV testing for HIV-negative persons, safer sex practices for both groups, and associations between HIV exposure laws and HIV-related stigma. Surveys of the laws and studies of enforcement practices were also conducted. Attention should be shifted from examining attitudes about these laws to exploring their potential influence on public health practices and behaviors related to the HIV continuum of care. Studies examining enforcement and prosecution practices are also needed. Adapting a theoretical framework in future research may be useful in better understanding the influence of HIV exposure laws on HIV risk behaviors.

O'Byrne P, Bryan A, Roy M. HIV criminal prosecutions and public health: an examination of the empirical research. *Med Humanit.* 2013;39(2):85-90.

OBJECTIVES: To review the extant literature on HIV criminal laws, and to determine the impact of these laws on public health practice. **METHODS:** The available research on this topic was obtained and reviewed. **RESULTS:** The extant literature addressed three main topics: people's awareness of HIV criminal laws; people's perceptions of HIV criminal laws; and the potential effects of HIV criminal laws on people's sexual, HIV-status disclosure and healthcare-seeking practices. Within these categories, the literature demonstrated a high level of awareness of HIV criminal laws, but a poor comprehension of these laws. For

perceptions, on the whole, the quantitative research identified support for, while the qualitative literature indicated opposition to, these laws. Lastly, the behavioural effects of HIV criminal laws appear to be complex and non-linear. **CONCLUSIONS:** A review of the extant literature from a public health perspective leads to the conclusion that HIV criminal laws undermine public health.

United States

Barber B, Lichtenstein B. Support for HIV testing and HIV criminalization among offenders under community supervision. *Education, Social Factors, and Health Beliefs in Health and Health Care Services*:253-273.

Purpose: U.S. health policy promotes HIV testing and linkage to care (test-and-treat) with an emphasis on high risk groups such as convicted offenders. We sought to identify whether or not laws for mandatory HIV disclosure to sexual partners are a barrier to HIV testing among offenders under community supervision. Methodology/approach: A total of 197 probationers and parolees were surveyed in a closed/open-ended item methodology on two reporting days in Alabama. Three main questions were asked: (1) What do offenders know about HIV? (2) What do they know about the law? (3) Do they support mandatory disclosure and HIV testing? Data for the quantitative items were analyzed with SPSS and matched with open-ended responses for explanatory purposes. Findings: Testing and criminalization of non-disclosure were fully supported as key elements of HIV prevention. This support was framed by conceptions of HIV as a killer disease, of people with HIV as potential murderers, and by low self-awareness of HIV risk. Social implications: While the study involved only a single group of convicted offenders in a southern state, the results suggest that disclosure laws legitimize HIV stigma and undermine test-and-treat strategies among communities at risk. Originality/value: The research is the first of its kind to investigate possible links between HIV criminalization and barriers to HIV prevention and care among convicted offenders.

Barber BW. *Knowledge and attitudes toward HIV/AIDS and HIV law among probationers and parolees in Alabama* [master's thesis]. Tuscaloosa, AL: Department of Criminal Justice, University of Alabama Libraries; 2013.

The Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) epidemic recently moved into its fourth decade in the U.S. In an attempt to combat this epidemic, lawmakers have implemented HIV criminalization laws, prevention programs, and treatment options in order to reduce the spread of HIV/AIDS. The number of prosecutions for violating HIV disclosure laws and the number of states implementing these laws continue to increase. However, the public health community is concerned that HIV disclosure laws do not reduce HIV transmission. This thesis seeks to examine the effects of HIV criminalization on the HIV testing and treatment by examining HIV knowledge and attitudes among probationers and parolees in Alabama. A self-administered 32 item survey was administered to 200 probationers and parolees in the Birmingham Probation and Parole Office for this purpose. The study found that (1) probationers and parolees are quite knowledgeable about HIV despite their lack of access to HIV prevention programs; (2) probationers and parolees who attend HIV prevention classes are more likely to perceive themselves as being at risk for contracting HIV compared to those who did not attend HIV prevention classes; and (3) HIV disclosure laws are perceived to be a barrier to HIV testing. These results suggest that probationers and parolees would benefit from HIV prevention classes and that they are skeptical about the benefits of HIV laws to reduce transmission.

Brown MJ, Serovich JM, Kimberly JA. Perceived intentional transmission of HIV infection, sustained viral suppression and psychosocial outcomes among men who have sex with men living with HIV: a cross-sectional assessment. *Sex Transm Infect.* 2017.

OBJECTIVE: HIV continues to be a global and national public health challenge, and men who have sex with men (MSM) are disproportionately affected in the USA. Transmission of HIV is intentional if the person living with HIV knows about his/her serostatus, acts with the intention to and actually transmits HIV. Research on intentional transmission of HIV infections is lacking, and the relationships between perceived intentional transmission, viral suppression and psychosocial outcomes have not been assessed. The objective of this study was to investigate the association between perceived intentional transmission of HIV, sustained viral suppression and psychosocial outcomes. METHODS: Data were obtained from 338 MSM living with HIV who participated in a disclosure intervention study. Logistic and linear regression models were used to assess the associations between perceived intentional transmission and viral suppression, condomless anal intercourse in

the past 30 days, being at risk for clinical depression, substance use, self-efficacies for condom use, HIV disclosure and negotiation of safer sex practices, and sexual compulsivity. RESULTS: 44% of the study population reported perceiving intentional HIV transmission. After adjusting for sociodemographic characteristics, men who thought that they were infected intentionally had 69% higher odds (adjusted OR: 1.69; 95% CI 1.01 to 2.83) of being at risk for clinical depression, and on average, scored approximately 3 points and 4 points higher on depressive symptoms and sexual compulsivity, respectively (adjusted beta: 3.29; 95% CI 0.42 to 6.15; adjusted beta: 3.74; 95% CI 1.32 to 6.17) compared with men who did not think that they were intentionally infected. After adjusting for confounders, there was no statistically significant association between perceived intentional transmission and viral suppression. CONCLUSIONS: Intervention programmes for MSM living with HIV who thought they were infected intentionally are warranted and should aim to attenuate depressive symptoms and sexual compulsivity.

Burris S, Beletsky L, Burlison J, Case P. Do criminal laws influence HIV risk behavior? An empirical trial. *Ariz. St. LJ.* 2007;39:467.

All states have criminal laws that can be used to punish sexual behaviors that pose some risk of HIV transmission; half have HIV-specific laws criminalizing sexual contact by people with HIV unless they abstain from unsafe sex, or disclose their HIV status and obtain consent from their partners. Whether these laws influence behavior is unknown. Illinois and New York exhibit contrasting legal conditions. Illinois has an HIV-specific law explicitly requiring disclosure by HIV-positive persons. New York has no HIV-specific law. This study tests the null hypothesis that differences in law and beliefs about the law do not influence condom use in anal or vaginal sex. In this empirical study, 490 people at elevated risk of HIV were interviewed, 248 in Chicago and 242 in New York City. Approximately half in each state were men who have sex with men ("MSM") and half were injecting drug users ("IDUs"). Respondents were classified as MSM if they reported ever having had sex with a man, and as IDUs if they reported having injected drugs at least twice in the last three months. One-hundred sixty two subjects reported known HIV infection (Chicago 58; New York City 104). Three-hundred twenty-eight reported being HIV negative or not knowing their HIV status. Indicators of the law were 1) residence in the state, and 2) belief that it is a crime for a person with HIV to have sex with another person without disclosing his or her serostatus. Using stepwise logistic regression, we examined independent predictors of unprotected sex, adjusting for factors including age, race/ethnicity, disclosure, biological sex at birth, sexual orientation and number of partners. People who lived in a state with a criminal law explicitly regulating sexual behavior of the HIV-infected were little different in their self-reported sexual behavior from people in a state without such a law. People who believed the law required the infected to practice safer sex or disclose their status reported being just as risky in their sexual behavior as those who did not. Our data do not support the proposition that passing a law prohibiting unsafe sex or requiring disclosure of infection influences people's normative beliefs about risky sex. Most people in our study believed that it was wrong to expose others to the virus and right to disclose infection to their sexual partners. These convictions were not influenced by the respondents' beliefs about the law or whether they lived in a state with such a law or not. Because law was not significantly influencing sexual behavior, our results also undermine the claim that such laws drive people with and or at risk of HIV away from health services and interventions. We failed to refute the null hypothesis that criminal law has no influence on sexual risk behavior. Criminal law is not a clearly useful intervention for promoting disclosure by HIV-positive people to their sex partners. Given concerns about possible negative effects of criminal law, such as stigmatization or reluctance to cooperate with health authorities, our findings suggest caution in deploying criminal law as a behavior change intervention for seropositives.

Chenneville T, Lynn V, Peacock B, Turner D, Marhefka SL. Disclosure of HIV status among female youth with HIV. *Ethics & Behavior.* 2015;25(4):314-331.

Minority female youth are significantly affected by the HIV epidemic. The purpose of this pilot study was to explore sexual behavior practices, disclosure of HIV status, attitudes about disclosure, and knowledge of HIV disclosure laws among female youth with HIV (YWH). Findings suggest that the majority of YWH studied have been sexually active since their HIV diagnosis, although the nature and extent of sexual activity varied. Rates of nondisclosure to sexual partners varied based on the type of question asked, but at least some of the YWH in this sample reported sexual activity with a partner who was unaware of the participant's HIV status. YWH appear to be more likely to disclose before, as opposed to after, sexual activity. Although most YWH

believe disclosure to sexual partners is important for a variety of reasons, many reasons exist for nondisclosure, including fear of rejection and limited communication skills. The majority of YWH in this sample were aware of the potential legal ramifications of nondisclosure although fear of legal repercussions was not the most important factor related to disclosure. These findings favor the implementation of HIV disclosure interventions over the enactment of HIV criminalization laws as a strategy for reducing HIV transmission.

Close EM. *An exploration of the implementation and effects of the North Carolina HIV control measures* [master's thesis]. Durham, NC: Department of Global Health, Duke University; 2012.

Since the beginning of the AIDS epidemic, governmental authorities across the country have attempted to legislate the behavior of HIV-positive individuals. North Carolina's HIV Control Measures exemplify this type of legislative endeavor. The North Carolina Legislature gave the North Carolina Commission for Public Health statutory authority to promulgate control measures for HIV/AIDS. The resulting HIV Control Measures ("control measures") are rules that govern the actions of HIV-positive individuals, their physicians, their partners, and state health officials and are meant to limit the spread of the disease. While these control measures were implemented to accomplish legitimate public health objectives, there has been very little research evaluating the extent to which they have fulfilled, or failed to fulfill, these goals. This project represents the beginning of an exploration of the ways that the control measures affect HIV policy in North Carolina. This study used a combination of qualitative interviews and legal research to better understand the on-the-ground implementation of the control measures and the ways that they affect the public health of both HIV-infected and HIV-uninfected individuals in the state. The results of the study include a consideration of the positive duties required of HIV-infected individuals under the control measures. Additional themes, such as recent scientific data on HIV treatment and the effect of the Internet on HIV generally, are also considered. Finally, overall thematic conclusions are offered and suggestions for subsequent explorations are presented.

Delavande A, Goldman D, Sood N. Criminal prosecution and Human Immunodeficiency Virus-related risky behavior. *The Journal of Law & Economics*. 2010;53(4):741-782.

We examine the consequences of prosecuting people who are human immunodeficiency virus (HIV) positive and expose others to the infection. We show that the effect of such prosecutions on the spread of HIV is a priori ambiguous. The prosecutions deter unsafe sex. However, they also create incentives for having sex with partners who are more promiscuous, which consequently increases the spread of HIV. We test these predictions and find that such prosecutions are associated with a reduction in the number of partners, an increase in safe sex, and an increase in sex with prostitutes. We estimate that doubling the prosecution rate could decrease the total number of new HIV infections by one-third over a 10-year period.

Dodson CM. *The role of harm, detectability, and knowledge of HIV non-disclosure laws in affecting punishment recommendations for HIV law violators* [master's thesis]. Norfolk, VA: Department of Psychology, Old Dominion University; 2016.

Many U.S. states have passed HIV non-disclosure laws that criminalize sexual behavior on the part of HIV-positive persons who do not disclose their HIV status to sexual partners. This study broadly focused on the impact of two major philosophical approaches for meting out punishment to law violators: the just deserts and the deterrence perspectives. The study examined how these two approaches may influence laypersons' motivations for punishing someone with HIV who violates an HIV non-disclosure law. In addition, the study examined how knowledge or no knowledge of an HIV non-disclosure law by the law violator influenced punishment recommendations. A 2 (Harm) X 2 (Detectability) X 2 (HIV Law Knowledge) ANOVA design was utilized, with punishment recommendations (i.e., prison sentence and fine) as the dependent measures (N = 224). Research questions pertaining to potential explanations (e.g., moral outrage, specific incapacitation, specific deterrence) for participants' punishment assignments were also examined. Results indicated that the most important motivation for meting out punishment was the harm caused by the HIV non-disclosure law violator. The detectability of the law violation and knowledge of the HIV non-disclosure law did not influence punishment recommendations. The findings are consistent with the just deserts perspective that retribution for the harm done by the HIV non-disclosure is a major motivator for punishing violations of the law.

Domingue J-L. *Nurses' knowledge, attitudes and documentation practices in a context of HIV criminalization: A secondary subgroup analysis of data from California, Florida, New York, and Texas nurses* [master's thesis]. Ottawa, Canada: School of Nursing, University of Ottawa; 2016.

Under international legal norms, HIV criminalization is considered to be an overly broad use of criminal law. In the United States, at least 33 states have HIV-specific criminal laws. Data from California, Florida, New York, and Texas nurses provided exemplars from different HIV-related criminal law approaches and the impact of those laws on nurses' practices. Nurses who cared for patients who expressed fears or concerns about HIV criminalization or patients who had been arrested for HIV-related crimes were more likely to correctly identify the presence or absence of HIV-specific laws in the states where they practised, when compared to nurses who did not care for such patients. Lack of knowledge about HIV-related criminal laws may erode the nurse-patient relationship. Jurisdiction specific education should be created and offered to nurses in order to address this knowledge gap and protect the dignity of people living with HIV.

Duru OK, Collins RL, Ciccarone DH, Morton SC, Stall R, Beckman R, Miu A, Kanouse DE. *Correlates of sex without serostatus disclosure among a national probability sample of HIV patients. AIDS Behav.* 2006;10(5):495-507. PMC2567832.

We examined potential correlates of sex without HIV disclosure within a sample of 875 participants from the HIV Cost and Services Utilization Study. Interviews with each participant assessed sexual activities with up to six recent partners, and this study included both respondent and partnership characteristics. Compared with marriage and/or primary same-sex relationships, occasional partnerships and one-time encounters were associated with sex with disclosure, and shorter relationships were more likely to involve sex without disclosure. Knowledge of partner serostatus was also associated with sex without disclosure. Women were less likely to have sex without disclosure than men having sex with men. We found an association between the perceived duty to disclose to all partners and sex without disclosure, while we found no association in multivariate analyses between outcome expectancies and sex without disclosure.

Forsyth AD, Valdiserri RO. *A state-level analysis of social and structural factors and HIV outcomes among men who have sex with men in the United States. AIDS Educ Prev.* 2015;27(6):493-504.

We apply a social determinants of health model to examine the association of select social and structural influences on AIDS diagnosis rates among men who have sex with men (MSM) in the U.S. states. Secondary data for key social and structural variables were acquired and analyzed. Standard descriptive and inferential statistics were used to examine bivariate and multivariate associations of selected social and structural variables with estimated rate of Stage 3 HIV infection (AIDS) per 100,000 MSM in 2010. We found that living in states with a higher demographic density of lesbian, gay, bisexual, and transgender persons is independently associated with lower AIDS diagnosis rates among MSM. In addition, we found that greater income inequality and higher syphilis rates among men were associated with greater AIDS diagnosis rates among MSM, which may be attributable to state policy environments that underinvest in social goods that benefit population health, and to the fact that ulcerative sexually-transmitted infections increase biological risk of HIV transmission and acquisition. To end the epidemic in the U.S., it will be critical to identify and address state-level social and structural factors that may be associated with adverse HIV outcomes for MSM.

Note: In the context of criminalization, the authors did not find a statistically significant association between HIV-specific criminal laws with states' AIDS diagnosis rates among MSM.

Francis AM, Mialon HM. *The optimal penalty for sexually transmitting HIV. American Law and Economics Review.* 2008;10(2):388-423.

We examine the consequences of prosecuting HIV-positive people who expose others to the infection. We show that the effect of such prosecutions on the spread of HIV is a priori ambiguous. They deter unsafe sex. However, they also create incentives for having sex with more promiscuous partners, consequently increasing the spread of HIV. We test these predictions and find that such prosecutions are associated with a reduction in the number of partners, increase in safe sex, and increase in sex with prostitutes. We estimate that doubling the prosecution rate could decrease the total cumulated number of new HIV infections by a third over a ten-year period.

French M. Counselling anomie: clashing governmentalities of HIV criminalisation and prevention. *Critical Public Health*. 2015;25(4):427-440.

HIV criminalisation is a term that describes the criminal prosecution of persons in instances of HIV transmission, exposure and so-called non-disclosure of their HIV serostatus. In the United States (US), there have been over 500 reported instances of HIV criminalisation. Over the past decade, several negative consequences of HIV criminalisation have been identified, including its capacity to increase stigma and social injustice. In addition, scholars have built an evidence base demonstrating that HIV criminalisation has the potential to undermine HIV prevention and that it is thus harmful to public health. This article contributes to that evidence base by (1) combining Foucaultian studies of 'governmentality with the sociology of 'anomie' to theorise the larger implications of HIV criminalisation for the institution of public health, and (2) presenting interviews with public health service providers working in Tennessee, USA. This state is an important site for studying the public health implications of HIV criminalisation because, between 2008 and 2012, it was reported to have led all American jurisdictions in prosecutions of HIV-specific criminal offences. Concentrating on discussions of post-test counselling, this article argues that a major system-level effect of HIV criminalisation is the propagation of an anomic affective climate, which makes it difficult to establish norms of HIV prevention.

Galletly CL, Dickson-Gomez J. HIV seropositive status disclosure to prospective sex partners and criminal laws that require it: perspectives of persons living with HIV. *Int J STD AIDS*. 2009;20(9):613-618. PMC4097389.

Thirty-one HIV-positive persons living in Michigan took part in focus group discussions about Michigan's HIV disclosure law. Discussion themes included perceived responsibility to prevent infection, concern about unwanted secondary disclosure of HIV-positive status, fear of being falsely accused of violating Michigan's HIV disclosure law and perceived vulnerability of HIV-positive persons within the US legal system. Although participants strongly agreed with the ostensible purpose of Michigan's criminal HIV disclosure law, there was considerable concern about the negative impact of the law on persons living with HIV.

Galletly CL, Difranceisco W, Pinkerton SD. HIV-positive persons' awareness and understanding of their state's criminal HIV disclosure law. *AIDS Behav*. 2009;13(6):1262-1269. PMC4538940.

Commentary on the potential impact of HIV-specific disclosure laws on persons living with HIV has been critical, plentiful, and enduring. Yet empirical information with which to answer even the most basic questions about these laws, such as whether HIV-positive persons living in a state with a disclosure law are aware of the law, is absent. This study reports on data gathered from a statewide sample of 384 HIV-positive persons living in a state with an HIV disclosure law. Participant awareness and understanding of the law were assessed. Data on the sources from which participants received information on the law and the perceived helpfulness of these sources were also collected. Analyses were conducted to identify associations between participant awareness or understanding of the law and demographic characteristics of participants or information sources encountered. The majority of participants were aware that their state had enacted an HIV-specific disclosure law. Understanding of the law was good, although there was substantial confusion over several provisions. The most prevalent and most helpful sources of information on the law were AIDS-related resources as opposed to mass media. Forty-two percent of the participants learned about the law when first diagnosed with HIV. Sixty-two percent of the participants reported that their case manager had told them about the law.

Galletly CL, Glasman LR, Pinkerton SD, Difranceisco W. New Jersey's HIV exposure law and the HIV-related attitudes, beliefs, and sexual and seropositive status disclosure behaviors of persons living with HIV. *Am J Public Health*. 2012;102(11):2135-2140. PMC3477954.

OBJECTIVES: We explored associations between awareness of New Jersey's HIV exposure law and the HIV-related attitudes, beliefs, and sexual and seropositive status disclosure behaviors of HIV-positive persons. **METHODS:** A statewide convenience sample (n = 479) completed anonymous written surveys during 2010. We recruited participants through networks of community-based organizations in the state's 9 health sectors. The survey assessed participants' awareness of New Jersey's HIV exposure law, their sexual and serostatus disclosure behavior in the past year, and their HIV-related attitudes and beliefs. We compared responses of participants who were and were not aware of the law through univariate analyses. **RESULTS:** Fifty-one percent of participants knew about the HIV exposure law. This awareness was not associated with

increased sexual abstinence, condom use with most recent partner, or seropositive status disclosure. Contrary to hypotheses, persons who were unaware of the law experienced greater stigma and were less comfortable with positive serostatus disclosure. **CONCLUSIONS:** Criminalizing nondisclosure of HIV serostatus does not reduce sexual risk behavior. Although the laws do not appear to increase stigma, they are also not likely to reduce HIV transmission.

Galletly CL, Lazzarini Z. Charges for criminal exposure to HIV and aggravated prostitution filed in the Nashville, Tennessee Prosecutorial Region 2000-2010. *AIDS Behav.* 2013;17(8):2624-2636. PMC4060526.

This paper examines comprehensive data on arrests for HIV-specific crimes within a single jurisdiction, the Nashville Tennessee prosecutorial region, over 11 years. There were 25 arrests for HIV exposure and 27 for aggravated prostitution. Eleven of the arrests for HIV exposure involved nonsexual behaviors; none alleged transmission. Sixteen of the arrests for HIV exposure involved sexual behavior; three alleged transmission. Aggravated prostitution cases (i.e. prostitution while knowing one has HIV) often involved solicitation of oral sex; none alleged transmission. Maximum sentences for HIV-specific crimes ranged from 5 to 8 years. We conclude that enforcement of US HIV-specific laws is underestimated. Fifty-two arrests over 11 years were recorded in one jurisdiction. Over half of the arrests involved behaviors posing minimal or no HIV transmission risk. Despite concerns about malicious, intentional HIV transmission, no cases alleged malice or intention.

Galletly CL, Pinkerton SD. Preventing HIV transmission via HIV exposure laws: applying logic and mathematical modeling to compare statutory approaches to penalizing undisclosed exposure to HIV. *J Law Med Ethics.* 2008;36(3):577-584. PMC2603033.

Twenty-four U.S. states have enacted HIV exposure laws that prohibit HIV-positive persons from engaging in sexual activities with partners to whom they have not disclosed their HIV status. There is little standardization among existing HIV exposure laws, which vary substantially with respect to the sexual activities that are prohibited without prior serostatus disclosure. Logical analysis and mathematical modeling were used to explore the HIV prevention effectiveness of two types of HIV exposure laws: "strict" laws that require HIV-positive persons to disclose their serostatus to prospective partners prior to any sexual activity and "flexible" laws that require seropositive status disclosure only prior to high-risk sex (e.g., unprotected anal or vaginal intercourse). These laws were compared relative to each other and to a no-law alternative. The results of these analyses indicate that, under most (though not necessarily all) circumstances, both strict and flexible exposure laws can be expected to reduce HIV transmission risk relative to the no-law alternative, with flexible exposure laws producing the greater reduction in risk. This study demonstrates how logical analysis and mathematical modeling techniques can make an important contribution to the construction of a rational basis for decisions about a highly contested public health policy issue.

Galletly CL, Pinkerton SD, DiFranceis W. A quantitative study of Michigan's criminal HIV exposure law. *AIDS Care.* 2012;24(2):174-179. PMC3428201.

The objectives of the project were (1) to determine the extent to which HIV-positive persons living in Michigan were aware of and understood Michigan's criminal HIV exposure law, (2) to examine whether awareness of the law was associated with seropositive status disclosure to prospective sex partners, and, (3) to examine whether awareness of the law was associated with potential negative effects of the law on persons living with HIV (PLWH) including heightened HIV-related stigma, perceived societal hostility toward PLWH, and perceived need to conceal one's HIV infection. The study design was cross-sectional. A statewide sample of 384 PLWH in Michigan completed anonymous pen and paper surveys in 1 of 25 data collection sessions. A majority of participants were aware of Michigan's HIV exposure law. Awareness of the law was not associated with increased seropositive status disclosure to all prospective sex partners, decreased HIV transmission risk behavior, or increased perceived responsibility for HIV transmission prevention. However, awareness of the law was significantly associated with disclosure to a greater proportion of sex partners prior to respondents' first sexual interaction with that partner. Awareness of the law was not associated with increased HIV-related stigma, perceived societal hostility toward PLWH, or decreased comfort with seropositive status disclosure. Evidence of an effect of Michigan's HIV exposure law on seropositive status disclosure was mixed. Further research is needed to examine the various forms of HIV exposure laws among diverse groups of persons living with or at increased risk of acquiring HIV.

Gorbach PM, Galea JT, Amani B, Shin A, Celum C, Kerndt P, Golden MR. Don't ask, don't tell: patterns of HIV disclosure among HIV positive men who have sex with men with recent STI practising high risk behaviour in Los Angeles and Seattle. *Sex Transm Infect.* 2004;80(6):512-517. PMC1744943.

OBJECTIVES: A high incidence of HIV continues among men who have sex with men (MSM) in industrialised nations and research indicates many MSM do not disclose their HIV status to sex partners. Themes as to why MSM attending sexually transmitted infection (STI) clinics in Los Angeles and Seattle do and do not disclose their HIV status are identified. METHODS: 55 HIV positive MSM (24 in Seattle, 31 in Los Angeles) reporting recent STI or unprotected anal intercourse with a serostatus negative or unknown partner from STI clinics underwent in-depth interviews about their disclosure practices that were tape recorded, transcribed verbatim, coded, and content analysed. RESULTS: HIV disclosure themes fell into a continuum from unlikely to likely. Themes for "unlikely to disclose" were HIV is "nobody's business," being in denial, having a low viral load, fear of rejection, "it's just sex," using drugs, and sex in public places. Themes for "possible disclosure" were type of sex practised and partners asking/disclosing first. Themes for "likely to disclose" were feelings for partner, feeling responsible for partner's health, and fearing arrest. Many reported non-verbal disclosure methods. Some thought partners should ask for HIV status; many assumed if not asked then their partner must be positive. CONCLUSIONS: HIV positive MSM's decision to disclose their HIV status to sex partners is complex, and is influenced by a sense of responsibility to partners, acceptance of being HIV positive, the perceived transmission risk, and the context and meaning of sex. Efforts to promote disclosure will need to address these complex issues.

Hasenbush A, Miyashita A, Wilson BD. *HIV criminalization in California: penal implications for people living with HIV/AIDS (updated June 2016).* The Williams Institute, UCLA School of Law; 2015. Available at: <https://williamsinstitute.law.ucla.edu/wp-content/uploads/HIV-Criminalization-California-Updated-June-2016.pdf>.

Given the lack of comprehensive data on the use of HIV criminal laws in California, Williams Institute researchers contacted the California Department of Justice and requested access to criminal offender record information (CORI) data. CORI data record any contacts an individual may have with the criminal justice system, from every event beginning at arrest through sentencing, so these data provide a full chronological record of how these laws are being utilized. After obtaining necessary security clearances, Williams Institute researchers were able to access the de-identified criminal history of all individuals who had had contact with the criminal justice system under Cal. Penal Code § 647f (solicitation while HIV-positive), Cal. Health & Safety Code § 120291 (exposure to HIV with intent to transmit), Cal. Penal Code § 12022.85 (sex offense sentence enhancement for HIV-positive status in nonconsensual sex crimes) and Cal. Health & Safety Code § 120290 (misdemeanor exposure to any communicable disease) from the time of their enactment to June 2014.

Hasenbush A, Miyashita A, Sears B. *The legal needs of cisgender women living with HIV: evaluating access to justice in Los Angeles.* The Williams Institute, UCLA School of Law; 2016. Available at: <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Legal-Needs-of-Cisgender-Women-Living-with-HIV-January-2016.pdf>.

"The Legal Needs of Cisgender Women Living with HIV: Evaluating Access to Justice in Los Angeles" report summarizes findings of the Legal Assessment of Needs Study ("LeAN Study") – an online survey with 387 respondents who identified as cisgender women living with HIV/AIDS in Los Angeles County. The report describes respondents' legal needs, respondents' experiences getting assistance for identified legal needs from both legal and non-legal sources, and barriers respondents faced in accessing assistance from both legal and non-legal sources, as well as, describing differences and similarities between transgender women and all other respondents. Finally, the report discusses how these legal needs may relate to health access and health status.

Hasenbush A, Wilson BD. *HIV criminalization against immigrants in California.* The Williams Institute, UCLA School of Law; 2016. Available at: <http://williamsinstitute.law.ucla.edu/wp-content/uploads/HIVCriminalizationAgainstImmigrants.2016.pdf>.

HIV criminalization is a term used to describe statutes that either criminalize otherwise legal conduct or that increase the penalties for illegal conduct based upon a person's HIV-positive status. California has four HIV-specific criminal laws, and one non-HIV-specific criminal law that criminalizes exposure to any

communicable disease. Having contact with the criminal system can have a particularly severe impact on immigrants in the United States, as it can be grounds for deportation. In California, more than one in four residents are foreign born. Given the large immigrant population in California, Williams Institute researchers analyzed California Criminal Offender Record Information (CORI) data on HIV offenses in California to explore the demographics and experiences of foreign born individuals as compared to their U.S. born counterparts.

Hasenbush A, Zanoni B. *HIV criminalization in California: evaluation of transmission risk*. The Williams Institute, UCLA School of Law; 2016. Available at: <https://williamsinstitute.law.ucla.edu/wp-content/uploads/HIVCriminalization.EvaluationofTransmissionRisk.2016.pdf>.

HIV criminalization is a term used to describe laws that criminalize otherwise legal conduct or increase penalties for criminal conduct based on a person's HIV-positive status. Currently, California has four HIV-specific criminal laws. Of those, none require actual transmission of HIV. This report analyzed the law, science and implementation of these statutes to determine the risk of transmission of the criminalized acts and the extent to which they are prosecuted.

Key findings include:

- From 1988 until June 2014, 379 incidents resulted in convictions for an HIV-specific felony or sentence enhancement.
- Of those, 100 percent required no actual transmission of HIV.
- 98 percent did not require intent to transmit HIV.
- 93 percent involved no specific allegation of conduct that is likely to have transmitted the virus:
- Ninety percent of convictions were in solicitation incidents in which it is unknown whether any contact beyond a conversation or an exchange of money was initiated, thus possibly not having any exposure to HIV.
- Three percent of incidents involved oral sex, a sex act whose transmission risk is estimated as "low" by the CDC.
- Only seven percent of incidents involved vaginal or anal sex by definition of the crime.

HIV criminal laws have been disproportionately applied to sex workers. This has a disproportionate impact on women and people of color. Since solicitation by definition includes survival and subsistence sex work, these laws are also likely to disproportionately impact LGBT youth and transgender women of color. Laws that criminalize conduct of a person who knows that they are HIV-positive may disincentivize testing and work against best public health practices.

Hasenbush A, Wilson BD, Miyashita A, Sharp M. *HIV criminalization and sex work in California*. The Williams Institute, UCLA School of Law; 2017. Available at: <https://williamsinstitute.law.ucla.edu/wp-content/uploads/HIV-Criminalization-and-Sex-Work-in-CA-Oct-2017.pdf>.

The vast majority of all HIV-specific criminal incidents in California involve people engaged in sex work or those suspected of engaging in sex work. A new report finds that women—and Black women, in particular—are the most disproportionately impacted by California's sex work laws, both as they apply to people living with HIV and people not living with HIV. Analyzing California criminal justice data from 2005 to 2013, researchers found that while women made up half of the population of California, they accounted for two-thirds of prostitution arrests. In the same time period, Black women made up 4% of all HIV-positive women in California but accounted for an average of 22% of the arrests for felony solicitation while HIV-positive, making them the most overrepresented group for this type of arrest.

Hasenbush A. *HIV Criminalization in Georgia*. The Williams Institute, UCLA School of Law; 2018. Available at: <https://williamsinstitute.law.ucla.edu/wp-content/uploads/HIV-Criminalization-Georgia-Jan-2018-1.pdf>.

Georgia laws that criminalize people living with HIV have resulted in 571 arrests from 1988 to September 2017, according to state-level criminal history record information analyzed by the Williams Institute. Analyses show some disparities in enforcement of the laws based on race, sex, geography, and underlying related offenses, including sex work and suspected sex work. Researchers found that HIV-positive Georgians in rural areas were more likely to be arrested for an HIV-related crime than those living in urban areas. Black men were more likely to be convicted of an HIV-related offense than white men and convictions for HIV arrests

were three times as likely when there was a concurrent sex work arrest. This report provides the first-ever overview of the use and enforcement of HIV-related laws in Georgia.

Hoppe T. Controlling sex in the name of “public health”: social control and Michigan HIV law. *Social Problems*. 2013;60(1):27-49.

In the state of Michigan, people infected with HIV are required by law to disclose their HIV-positive status to their sexual partners. Michigan public health laws enacted in the 1980s provide guidance for health officials tasked with investigating and managing what are termed “health threat to others” cases. Based on interviews with local health officials responsible for managing “health-threat” cases, I argue that the surveillance strategies employed by officials to identify these cases can be understood as an important site of social control. The first, “formal” technique for controlling HIV-positive residents involves health officials in a minority of participating jurisdictions actively cross-referencing epidemiological surveillance technologies such as HIV testing and contact tracing in order to identify potential health-threat cases. The second, “informal” technique is characterized by “third party” phone reports received by health officials from local residents who accuse others in their community, who they suspect are HIV positive, of not disclosing. Through an original analysis of the strategies employed by health officials to control HIV-positive residents, this article brings the theoretical insights of the sociological literature on social control to bear on the field of public health.

Hoppe T. From sickness to badness: the criminalization of HIV in Michigan. *Soc Sci Med*. 2014;101:139-147.

Sociological approaches to the social control of sickness have tended to focus on medicalization or the process through which social phenomena come to be regulated by medicine. Much less is known about how social problems historically understood as medical come to be governed by the criminal law, or what I term the “criminalization of sickness.” Thirty-three US states have enacted criminal statutes that require all HIV-positive individuals to disclose their infection before engaging in a wide range of sexual practices. Drawing on evidence from 58 felony nondisclosure convictions in Michigan (95% of all convictions between 1992 and 2010), I argue that the enforcement of the state’s HIV disclosure law is not driven by medical concerns or public health considerations. Rather, it reflects pervasive moralizing narratives that frame HIV as a moral infection requiring interdiction and punishment.

Hoppe T. Disparate risks of conviction under Michigan’s felony HIV disclosure law: An observational analysis of convictions and HIV diagnoses, 1992–2010. *Punishment & Society*. 2015;17(1):73-93.

Recent public debates on race and crime have reignited an interest in the criminology literature on the effect of victim characteristics on criminal justice outcomes. This article examines whether defendant and complaining witness demographic characteristics are associated with disparate outcomes under Michigan’s felony HIV disclosure statute, which makes it a crime for HIV-positive individuals to have sex without first disclosing their HIV-status. Despite indications nationwide that the number of defendants charged under HIV-specific criminal statutes (HSCS) is increasing, few empirical studies have examined their application. This study of HSCS convictions (N = 51) retrospectively observes and compares the risks of conviction under Michigan’s HSCS for particular HIV-positive subpopulations between 1992 and 2010. Overall, a comparatively greater risk of conviction was observed for black men with female partners and white women overall. Contrary to expectations, a comparatively low risk of conviction was observed for men with male partners as compared to men with female partners. While the observational methodology employed in this analysis cannot identify the causal mechanisms driving the observed disparities, the findings nonetheless suggest an uneven application of Michigan’s HIV disclosure law deserving of further inquiry.

Horvath KJ, Meyer C, Rosser BR. Men Who have sex with men who believe that their state has a HIV criminal law report higher condomless anal sex than those who are unsure of the law in their state. *AIDS Behav*. 2017;21(1):51-58.

We assessed the effects of beliefs about state HIV criminal law on condomless anal sex (CAS < 3 months) among men who have sex with men (MSM) residing in 16 US states (n = 2013; M = 36 years old; 75 % White; 82 % HIV-negative) completing an online survey in 2010 and stratified by residency in a state with any or sex-specific HIV criminal law(s) or where a HIV-related arrest, prosecution, or sentence enhancement (APSE) had occurred. Three-quarters of MSM reported that they were unsure of the law in their state. Men

who believed there was a HIV law in their state but lived in states without any or a sex-specific HIV criminal law(s) had higher probabilities of CAS compared to those who were unsure of their state's law; men who believed there was a HIV law in their state and lived in a state where an APSE had occurred had higher probabilities of CAS compared to those who were unsure of their state's law. Correct knowledge of state law was not associated with CAS. Findings suggest that HIV criminal laws have little or counter-productive effects on MSM's risk behavior.

Horvath KJ, Weinmeyer R, Rosser S. Should it be illegal for HIV-positive persons to have unprotected sex without disclosure? An examination of attitudes among US men who have sex with men and the impact of state law. *AIDS Care*. 2010;22(10):1221-1228. PMC3423319.

The aims of this study were to describe the overall pattern and predictors of attitudes toward criminalizing unprotected sex without disclosure by persons living with HIV among a broad sample of men who have sex with men (MSM) living in the USA, and to examine whether attitudes and sexual risk behavior differ by states with HIV-specific laws or no such laws. Participants (n=1725) were recruited in a 3.5 month period to complete a cross-sectional 70-minute online survey assessing attitudes and high risk sexual behavior. Participants self-identified as male, 18 years of age or older, a US resident, and having ever had sex with a man. In addition, participants were coded as residing in a state with HIV-specific laws or not. Results showed that most (65%) respondents believed it should be illegal for persons living with HIV to have unprotected sex without disclosure. However, among the total sample and HIV-positive MSM, attitudes and unprotected sex with recent partners did not vary by state law. Believing that it should not be illegal for persons living with HIV to have unprotected sex without disclosure was associated with HIV-positive status (OR=0.33), higher education (ORs=0.42-0.64), gay orientation (non-gay orientation: OR=1.54), perceptions that state residents were somewhat or very accepting toward homosexuality (OR=0.75), unprotected anal intercourse with two or more recent sexual partners (OR=0.72), and lower perceptions of responsibility (OR=0.75). The results did not support the proposition that HIV-specific laws deter high-risk sexual behavior, however further research is needed to examine whether they act as a barrier for MSM at highest risk for acquiring or transmitting HIV.

Kalichman SC, Kalichman MO, Cherry C, Grebler T. HIV disclosure and transmission risks to sex partners among HIV-positive men. *AIDS Patient Care STDS*. 2016;30(5):221-228. PMC4870647.

Disclosure of HIV-positive status to sex partners is critical to protecting uninfected partners. In addition, people living with HIV often risk criminal prosecution when they do not inform sex partners of their HIV status. The current study examined factors associated with nondisclosure of HIV status by men living with HIV in Atlanta, GA (92% African American, mean age = 43.8), who engage in condomless sex with uninfected sex partners. Sexually active HIV-positive men (N = 538) completed daily electronic sexual behavior assessments over the course of 28 days and completed computerized interviews, drug testing, medication adherence assessments, and HIV viral load retrieved from medical records. Results showed that 166 (30%) men had engaged in condomless vaginal or anal intercourse with an HIV-uninfected or unknown HIV status sex partner to whom they had not disclosed their HIV status. Men who engaged in nondisclosed condomless sex were less adherent to their HIV treatment, more likely to have unsuppressed HIV, demonstrated poorer disclosure self-efficacy, enacted fewer risk reduction communication skills, and held more beliefs that people with HIV are less infectious when treated with antiretroviral therapy. We conclude that undisclosed HIV status is common and related to condomless sex with uninfected partners. Men who engage in nondisclosed condomless sex may also be more infectious given their nonadherence and viral load. Interventions are needed in HIV treatment as prevention contexts that attend to disclosure laws and enhance disclosure self-efficacy, improve risk reduction communication skills, and increase understanding of HIV infectiousness.

Kay ES, Smith BD. State-level HIV criminalization laws: social construction of target populations? *Journal of Policy Practice*. 2017;16(2):133-146.

Applying Schneider and Ingram's social constructionist framework that places people living with HIV (PLWH) in the intersection of both minimal power and negative social construction, this study investigates whether HIV criminalization laws are more likely to be present in states that have a relatively larger percentage of socially marginalized populations. A database was assembled of state-level variables related to HIV criminalization laws and indicators of social marginalization. Analyses show that states with HIV criminalization

laws have relatively larger African American populations. Future research is needed to further clarify the racial component of HIV criminalization.

Kelly B, Khanna N, Rastogi S. *Diagnosis, sexuality and choice: Women living with HIV and the quest for equality, dignity and quality of life in the US*. U.S. Positive Women's Network; 2011. Available at: <https://pwnusa.files.wordpress.com/2013/06/pwn-hr-survey-final.pdf>.

The U.S. Positive Women's Network conducted a survey from February 2010-January 2011. It is our hope that the below analysis of the survey results will contribute to and enrich an ongoing dialogue on the best ways to lessen existing health disparities experienced by women. In the survey, women were asked about their HIV testing experiences, provider attitudes and knowledge about their sexual health and reproductive choices as HIV-positive women, and the effects of criminal HIV exposure and transmission laws on their personal decision making and on the HIV epidemic overall. The below themes were apparent throughout the survey as areas requiring increased attention:

- The Right to Sexual and Reproductive Health and Reproductive Choice: HIV specialist and general practitioners are not adequately informed about HIV-positive women's reproductive rights and options thereby limiting the full range of reproductive choices and options for women living with HIV.
- The Right to be Free from Harmful HIV-related Stigma: HIV related stigma and lack of provider professionalism, such as inadequate confidentiality policies, or discriminatory treatment, impacts women's decision-making when it comes to accessing care or when making decisions related to their reproductive health and choices.
- The Right to Accessible and High Quality Health Care: Women often do not know they are at risk for HIV or are not encouraged to get tested for HIV. When receiving HIV-positive test results from doctors, women have experienced a range of negative experiences sometimes resulting from the doctor's general lack of knowledge about HIV and/or lack of knowledge about referral resources. Lack of information on the part of providers may result in late testing, poor health outcomes, and an inability to provide life-saving referrals to women-centered supportive services.
- The Consequences of Criminalizing HIV-positive People's Sexuality: The majority of the respondents felt that laws criminalizing HIV transmission and exposure are not an effective HIV prevention strategy. If anything many of the respondents cited the harm that could result from such laws: laws can be used as tools of abuse; laws increase the already pervasive stigma faced by HIV-positive women; and the laws may contribute to discrimination as well as hinder testing, disclosure and treatment adherence campaigns.

Klitzman R, Kirshenbaum S, Kittel L, Morin S, Daya S, Mastrogiacomo M, Rotheram-Borus MJ. Naming names: perceptions of name-based HIV reporting, partner notification, and criminalization of non-disclosure among persons living with HIV. *Sexuality Research and Social Policy*. 2004;1(3):38-57.

Policies of name-based HIV reporting, partner notification (PN), and criminalization of non-disclosure of HIV positive status to sexual partners remain controversial. The views of people living with HIV (PLH) are critical to the success of these three initiatives, but have been understudied. Thus, we interviewed 76 PLH about these policies. Themes arose of potential public health benefits (e.g., epidemiological surveillance and notification of possible exposure) and costs (e.g., deterrence of testing); threats to privacy, civil rights and relationships; government mistrust; and beliefs that prevention is an individual, not governmental responsibility. Misperceptions about the intent, content and scope of these policies, and past experiences of discrimination, shaped these attitudes. To enhance development and implementation of HIV prevention strategies, the views of PLH must be taken into account, and education campaigns need to address misperceptions and mistrust. These data shed light on difficulties in developing and implementing policies that may affect sexual behavior, and have critical implications for future research.

Lazzarini Z, Bray S, Burris S. Evaluating the impact of criminal laws on HIV risk behavior. *J Law Med Ethics*. 2002;30(2):239-253.

This paper, produced as part of a larger project to assess the public health impact of criminalization as a structural intervention to prevent HIV, provides the most complete picture to date of the existence and application of criminal laws related to HIV risk behavior in the United States. Part I is a general introduction to principles of criminal law and the various types of criminal provisions found in the United States and its

territories. In Part II, the paper reports the results of research documenting the laws adopted by states and territories, and the number of prosecutions that have been reported in legal decisions and the press. Part III discusses the implications of these findings within the framework of the leading theoretical accounts of the operation of criminal law. The second phase of this project, expected to be completed in 2003, will correlate these legal findings with survey and other data on risk behavior and knowledge of laws.

Lee SG. Criminal law and HIV testing: empirical analysis of how at-risk individuals respond to the law. *Yale J Health Policy Law Ethics*. 2014;14(1):194-238.

This Note assesses the effect of laws that specifically criminalize behaviors that expose others to the human immunodeficiency virus (HIV). This Note examines the relationship between HIV testing decisions by high-risk individuals and the existence of these HIV-specific statutes, as well as the amount of media coverage related to them. One of the main reasons public health experts criticize criminalization of HIV-exposing behavior is that it may discourage at-risk individuals from undergoing HIV testing. This argument, however, remains empirically untested to date. This study quantitatively examines whether at-risk individuals living in jurisdictions with HIV-specific statutes are less likely to report having been tested for HIV in the past year compared to those living in jurisdictions without HIV-specific statutes. Regression analysis is conducted using data collected in the United States over a seven-year span. The results show that at-risk individuals residing in states with HIV-specific statutes are no less likely to report having been tested for HIV than those who live in other states. However, the number of people who reported that they had been tested for HIV is inversely correlated with the frequency of newspaper coverage of criminalization of HIV-exposing behavior. These findings imply that at-risk individuals' HIV testing is associated with media coverage of criminalizing HIV-exposing behavior. The negative impact that criminal law has on HIV testing rates could be a serious public health threat. Testing is often the initial step in public health interventions that most effectively modify the risky behavior of HIV-positive individuals. The adverse consequence of criminalization should weigh heavily in the design and application of criminal sanctions for HIV-exposing behavior. In addition, future research should further explore the relationships between criminalization, media coverage of criminalization, and HIV testing decisions for a more nuanced understanding of the consequences of criminalization.

Lichtenstein B. Internet advice on disclosure of HIV status to sexual partners in an era of criminalization. *International Public Health Journal*. 2012;4(4):377.

HIV-specific statutes are increasingly popular in the United States and often impose harsh penalties for failure to disclose an HIV diagnosis to sexual partners. The purpose of this study was to examine HIV-related websites for information about non-disclosure as a crime and the relevance of this advice for US audiences. Internet searches were conducted for HIV-related websites with advice on disclosure to sexual partners. Once identified, these sites were analyzed for content, quality, and type of approach to disclosure and the law. Each site was given a page ranking (P. Score) according to Google's priority listing algorithm, and a value ranking (V. Score) for textual content and quality of advice. Internet advice on disclosure and the law was highly variable. With few exceptions, highly ranked US sites offered less advice than the sites in Britain, Canada and Australia. All US sites followed the law by placing the onus of responsibility for disclosure on the HIV-infected individual, but few offered advice on how to disclose or how to obtain proof of disclosure in order to avoid prosecution. None addressed the special risks of African Americans who are most likely to be prosecuted for non-disclosure. It is concluded that HIV advice website should offer strategies on how to disclose to sexual partners and to document proof in case of prosecution.

Lichtenstein B, Rodgers C, Marefka LE, Hinson MD, Cook-Heard D, Rygiel SD, Sturdevant MS. Two vignettes of adolescent sexual disclosure: guidance for HIV clinical practice. *Journal of Infection Prevention*. 2017;18(1):10-16. PMC5298377.

HIV-positive adolescents are required by law to notify sexual partners, but can find it difficult to achieve this goal. This article offers practice guidance for counselling HIV-positive adolescents about sexual disclosure in clinical settings and for building confidence in managing sexual lives with HIV. We use two vignettes to illustrate key differences between perinatally and sexually infected adolescents in terms of readiness to disclose, and include a set of strategies for both groups that can be tailored to individual circumstances and contexts. The toolbox of strategies we describe include pre-counselling, focused counselling, social support groups and technical support. Pre-counselling helps to identify barriers and motivations to sexual disclosure

and is followed by counselling sessions in which the focus is on role playing and sexual scripts for disclosure. Peer-led support groups are designed to boost adolescent confidence, and pre-paid cell phones, text messaging, ready-dial phone numbers and a private Facebook page provide back-up support and out-of-hours contact. Since sexual disclosure can be a risky proposition, safety plans, such as having an emergency contact person, should always be in place. These strategies are designed to empower vulnerable adolescents, foster trust between patient and provider, and reduce HIV transmission to sexual partners.

Lichtenstein B, Whetten K, Rubenstein C. "Notify your partners--it's the law": HIV providers and mandatory disclosure. *J Int Assoc Provid AIDS Care*. 2014;13(4):372-378.

HIV care providers in the United States must counsel clients about disclosure to sexual partners and report anyone who is suspected of noncompliance. This study compared provider attitudes and practices in relation to counseling clients about mandatory disclosure in North Carolina and Alabama, the 2 states with similar HIV epidemiology but different laws for HIV control. Personal interviews were conducted with 20 providers in each state (n = 40). The results were analyzed in a qualitative, cross-comparison method to identify patterns of convergence or difference. Providers in both states believed that clients often failed to notify sexual partners and were secretive if questioned about disclosure. Differences in counseling styles and procedures for each state were noteworthy. Compared to Alabama, North Carolina had harsher penalties for nondisclosure, stricter and more standardized procedures for counseling, and providers expressed greater support for HIV criminalization. Although most North Carolina providers viewed the stricter standards as beneficial for HIV care and control, Alabama providers were likely to view such standards as a barrier to patient care. These results indicated a direct relation between state HIV law, provider attitudes, and counseling procedures for mandatory disclosure.

Lloyd KC. *Vital politics and anticipatory practice of HIV treatment as prevention: the discursive work of the biomedicalization of HIV prevention* [dissertation]. San Francisco, CA: Department of Sociology, University of California, San Francisco; 2016.

HIV treatment as prevention is an emerging biomedical prevention approach that seeks to utilize routine HIV testing, linkage to and engagement in HIV care, and the consumption of antiretrovirals in order to suppress individuals' viral loads, greatly reducing or eliminating the risk of onward transmission of HIV. Drawing on interviews with HIV scientists, policymakers, clinicians, and leaders in HIV community advocacy, ethnographic field work at three global HIV scientific meetings, and extant narrative, visual and material data, this multi-sited study explores the emerging professional discourses that are co-constitutive of HIV treatment as prevention. Through an inductive process of data collection and analysis, four broad analytic problem spaces emerged: the reconfiguring of HIV risk discourses through pharmacological noninfectiousness, the transformations in biomedical surveillance practices as well as subjectivities via a prioritization of viral suppression and viral load monitoring, and the construction of antiretrovirals themselves as technoscientific 'things' which both potentiate and disrupt their own use as prevention technologies, in particular, via an anticipatory orientation to the future. This project contributes to work on biomedicalization, particularly on theorizing about transformations of risk and surveillance practices, subjectivity and forms of biomedical citizenships, as well as work on anticipation, notably on the creative effect of biomedical technologies and imagined futures.

Ma A, Chambers BD, Jenkins Hall W, Tanner AE, Piper CN. Individual and structural factors influencing HIV care linkage and engagement: Perceived barriers and solutions among HIV-positive persons. *Journal of HIV/AIDS & Social Services*. 2017;16(1):34-42.

To meet the National HIV/AIDS Strategy's goals of reducing and preventing HIV transmission, understanding factors that shape HIV-positive persons' care-seeking behaviors is critical. Accordingly, this study examined factors that affect HIV care linkage and engagement. Six focus groups were conducted with 33 HIV-positive persons living in North Carolina. A variety of factors influenced care behaviors, including: structural and policy factors, relationship with HIV care systems, and individuals' personal characteristics. Participants also provided solutions for addressing specific factors to care. Improving clinical services and utilizing context-specific strategies can help facilitate greater care linkage and engagement.

Miyashita A, Hasenbush A, Wilson BD, Meyer I, Nezhad S, Sears B. *The legal needs of people living with HIV: evaluating access to justice in Los Angeles*. The Williams Institute, UCLA School of Law; 2015. Available at: <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Legal-Needs-People-Living-with-HIV-Los-Angeles-County-April-2015.pdf>.

This report summarizes findings of the Legal Assessment of Needs Study (“LeAN Study”) – an online survey with 387 respondents who identified as people living with HIV/AIDS (“PLWH”). We describe respondents’ legal needs, respondents’ experiences getting assistance for identified legal needs from both legal and non-legal sources, and barriers respondents faced in accessing assistance from both legal and non-legal sources. We describe differences and similarities among subpopulations that are traditionally underserved and understudied, including gay and bisexual men (“GBM”), people of color, and cisgender and transgender women. Finally, we discuss how these legal needs may relate to health access and health status.

Motley DN. *Living and loving: a qualitative exploration of the dating and sexual relationships of HIV-positive young black gay, bisexual, and other men who have sex with men* [dissertation]. Chicago, IL: Department of Psychology, DePaul University; 2016.

Infection with HIV is a global pandemic that continues to have particular impacts on Black men who have sex with men. Accordingly, researchers have examined risk behaviors in order to inform interventions that seek to decrease transmission. However, there has been relatively little research that has examined the dating and sexual experiences of Black GBMSM living with HIV absent a particular focus on sexual risk and potential transmission. The present study seeks to better understand the dating and sexual experiences of a sample of young Black GBMSM living with HIV. Twenty young Black GBMSM living with HIV were interviewed using a semi-structured interview guide meant to explore their dating and sexual experiences since diagnosis. Using thematic analysis, the author identified salient aspects of the broad identity-related experiences, dating experiences, and sexual experiences for young Black GBMSM living with HIV. Salient themes related to identity were: (1) broad experiences as young Black GBMSM living with HIV, (2) experiences related to Black identity, (3) experiences related to sexual orientation, and (4) experiences related to HIV. Salient themes related to dating were: (1) broad dating experiences as related to Blackness, (2) impacts of HIV on new relationships, (3) impacts of HIV on existing relationships, and (4) qualities of healthy dating relationships. Salient themes related to sexual relationships were: (1) sexual experiences as related to Blackness, (2) relationship between HIV and sexual desire, (3) impacts of HIV on sexual intercourse, (4) fear of hurt if partner becomes HIV-positive, (5) sexual risk negotiation, and (6) qualities of healthy sexual relationships. Salient themes that related to both dating and sex were: (1) selecting partners and (2) navigating disclosure in relationships. Findings suggest that HIV is the most salient factor HIV-positive young Black GBMSM consider when exploring their experiences in intimate relationships. Given the primacy of HIV and the negative trend of participants’ experiences related to others’ perception of HIV, suggestions for improving sexual health education and public health campaigns are offered.

National Alliance of State and Territorial AIDS Directors. *Understanding state departments of health and corrections collaboration: A summary of survey findings—part II and strategic guidance towards ending criminalization-related stigma and discrimination*. 2011. Available at: https://www.nastad.org/sites/default/files/decriminalization_findings_.pdf.

One of the primary goals of this survey was to learn which states have public health policies that have been (or could be) used to penalize individuals for non-disclosure, exposure or transmission of HIV, and to use the data collected to formulate preliminary guidance for health departments on ways to evaluate and modify policies and practices. The results of survey responses are discussed in greater detail below, but the data show that there is a pressing need for a review of HIV criminalization practices. In addition to the survey findings, Part II includes supplemental resources that health departments can use to review and, if needed, modify their public health policies (see the attached Guidelines to End HIV Criminalization In Public Health Practice and Sample HIV Criminalization Survey Assessment).

Panagiotoglou D, Olding M, Enns B, Feaster DJ, Del Rio C, Metsch LR, Granich RM, Strathdee SA, Marshall BDL, Golden MR, Shoptaw S, Schackman BR, Nosyk B, Localized HIVMSG. Building the Case for Localized Approaches to HIV: Structural Conditions and Health System Capacity to Address the HIV/AIDS Epidemic in Six US Cities. *AIDS Behav.* 2018;22(9):3071-3082. PMC6076864

Since the discovery of the secondary preventive benefits of antiretroviral therapy, national and international governing bodies have called for countries to reach 90% diagnosis, ART engagement and viral suppression among people living with HIV/AIDS. The US HIV epidemic is dispersed primarily across large urban centers, each with different underlying epidemiological and structural features. We selected six US cities, including Atlanta, Baltimore, Los Angeles, Miami, New York, and Seattle, with the objective of demonstrating the breadth of epidemiological and structural differences affecting the HIV/AIDS response across the US. We synthesized current and publicly-available surveillance, legal statutes, entitlement and discretionary funding, and service location data for each city. The vast differences we observed in each domain reinforce disparities in access to HIV treatment and prevention, and necessitate targeted, localized strategies to optimize the limited resources available for each city's HIV/AIDS response.

Phillips JC, Webel A, Rose CD, Corless IB, Sullivan KM, Voss J, Wantland D, Nokes K, Brion J, Chen WT, Liping S, Eller LS, Tyer-Viola L, Rivero-Mendez M, Nicholas PK, Johnson MO, Maryland M, Kempainen J, Portillo CJ, Chaiphibalsaridi P, Kirksey KM, Sefcik E, Reid P, Cuca Y, Huang E, Holzemer WL. Associations between the legal context of HIV, perceived social capital, and HIV antiretroviral adherence in North America. *BMC Public Health.* 2013;13:736. PMC3750916.

BACKGROUND: Human rights approaches to manage HIV and efforts to decriminalize HIV exposure/transmission globally offer hope to persons living with HIV (PLWH). However, among vulnerable populations of PLWH, substantial human rights and structural challenges (disadvantage and injustice that results from everyday practices of a well-intentioned liberal society) must be addressed. These challenges span all ecosocial context levels and in North America (Canada and the United States) can include prosecution for HIV nondisclosure and HIV exposure/transmission. Our aims were to: 1) Determine if there were associations between the social structural factor of criminalization of HIV exposure/transmission, the individual factor of perceived social capital (resources to support one's life chances and overcome life's challenges), and HIV antiretroviral therapy (ART) adherence among PLWH and 2) describe the nature of associations between the social structural factor of criminalization of HIV exposure/transmission, the individual factor of perceived social capital, and HIV ART adherence among PLWH. **METHODS:** We used ecosocial theory and social epidemiology to guide our study. HIV related criminal law data were obtained from published literature. Perceived social capital and HIV ART adherence data were collected from adult PLWH. Correlation and logistic regression were used to identify and characterize observed associations. **RESULTS:** Among a sample of adult PLWH (n = 1873), significant positive associations were observed between perceived social capital, HIV disclosure required by law, and self-reported HIV ART adherence. We observed that PLWH who have higher levels of perceived social capital and who live in areas where HIV disclosure is required by law reported better average adherence. In contrast, PLWH who live in areas where HIV transmission/exposure is a crime reported lower 30-day medication adherence. Among our North American participants, being of older age, of White or Hispanic ancestry, and having higher perceived social capital, were significant predictors of better HIV ART adherence. **CONCLUSIONS:** Treatment approaches offer clear advantages in controlling HIV and reducing HIV transmission at the population level. These advantages, however, will have limited benefit for adherence to treatments without also addressing the social and structural challenges that allow HIV to continue to spread among society's most vulnerable populations.

Robinson BA. Doing sexual responsibility: HIV, risk discourses, trust, and gay men interacting online. *Sociological Perspectives.* 2017. 2017/5/17.

This study draws from interviews with HIV-negative gay men to show how they are doing sexual responsibility online and how their actions uphold moralizing discourses around HIV. The analysis shows how gay men often engage in boundary work through stating their HIV status and "safe sex" practices on their online profile and through screening other people's profiles for similar information. The gay men also avoid interactions with HIV-positive people, maintaining the stigmatization of HIV-positive people and constructing an HIV-positive serostatus as a status distinction. However, although the HIV-negative gay men are often invested in doing sexual responsibility, they eschew condom use with people they trust. This study then demonstrates

the limitations and unintended consequences of discourses that often focus on risk and individual responsibility. These discourses ignore the relational and emotive components of sexual interactions, and hence fail to capture the complexities of people's lives.

Sprague L, Strub S. *The Sero Project: National criminalization survey—preliminary results, July 25, 2012. Sero Project; 2012.*

Overall findings:

1. Responses from US people living with HIV (n=2076) in the sample paint a picture of a disabling legal environment, one where people living with HIV receive vague information—if any—about how to protect themselves from prosecution and results in a fear of false accusations and little trust in the judicial system to give them a fair hearing in the event of a prosecution.
2. People living with HIV from the Midwest and the South were more likely to know that HIV-specific laws existed in their states and to have been told of this when they received their HIV-positive test results. However, the great majority of these respondents, like those from every region, reported a lack of clarity about what the law required. Respondents from the Midwest and South were also more likely to fear false accusations and even less likely to trust the judicial system to give them a fair hearing.
3. Despite the existence of criminal laws to prosecute non-disclosure, when asked to describe their motivations for disclosing their HIV-status to a partner, very few people living with HIV in the sample named the law as important in their disclosure decision-making. The primary reasons for disclosure were: disclosure is the right thing to do, to have honest relationships, and to not cause harm to another person.
4. More than 8 in 10 people living with HIV in the study said that they believe that both sexual partners share equally in the responsibility for safer sex.
5. The fear of prosecutions related to HIV-status creates concerns about testing and accessing care for HIV. One-quarter of respondents knew someone (or multiple people) who told them that they did not want to get an HIV test because of fears of prosecution. This response was most common in the Midwest. In addition, almost half of the respondents felt it could be reasonable for someone to avoid testing for HIV, and 40% felt it could be reasonable for someone to avoid accessing care, because of fear of prosecutions.

Sweeney P, Gray SC, Purcell DW, Sewell J, Babu AS, Tarver BA, Prejean J, Mermin J. Association of HIV diagnosis rates and laws criminalizing HIV exposure in the United States. *AIDS*. 2017;31(10):1483-1488.

OBJECTIVE: To assess whether state criminal exposure laws are associated with HIV and stage 3 (AIDS) diagnosis rates in the United States. **DESIGN:** We assessed the relationship between HIV and stage 3 (AIDS) diagnosis data from the National HIV Surveillance System and the presence of a state criminal exposure law as identified through WestlawNext by using generalized estimating equations. **METHODS:** We limited analysis to persons aged at least 13 years with diagnosed HIV infection or AIDS reported to the National HIV Surveillance System of the Centers for Disease Control and Prevention. The primary outcome measures were rates of diagnosis of HIV (2001-2010 in 33 states) and AIDS (1994-2010 in 50 states) per 100 000 individuals per year. In addition to criminal exposure laws, state-level factors evaluated for inclusion in models included income, unemployment, poverty, education, urbanicity, and race/ethnicity. **RESULTS:** At the end of the study period, 30 states had laws criminalizing HIV exposure. In bivariate models ($P < 0.05$), unemployment, poverty, education, urbanicity, and race/ethnicity were associated with HIV and AIDS diagnoses. In final models, proportion of adults with less than a high school education and percentage of the population living in urban areas were significantly associated with HIV and AIDS diagnoses over time; criminal exposure laws were not associated with diagnosis rates. **CONCLUSION:** We found no association between HIV or AIDS diagnosis rates and criminal exposure laws across states over time, suggesting that these laws have had no detectable HIV prevention effect.

Note: Two letters to editors were published in response to this study (McClelland, 2017; Sah, 2017).

McClelland A, French M, Mykhalovskiy E, Gagnon M, Manning E, Peck R, Clarke C, McCaskell T. The harms of HIV criminalization: responding to the 'association of HIV diagnosis rates and laws criminalizing HIV exposure in the United States'. *AIDS*. 2017;31(13):1899-1900.

Note: This letter was a response to Sweeney et al. (2017) who assessed the relationship between HIV and stage 3 (AIDS) diagnosis data from the National HIV Surveillance System and the presence of a state criminal exposure law and found 'no association between HIV or AIDS diagnosis rates and criminal exposure laws across states over time'. The authors of the correspondence letter feel that while the study has added new knowledge about the impact of criminalization on HIV prevention, they also share some concerns:

- *First, this research does not sufficiently address the myriad negative impacts that HIV laws have had on the lives of people living with HIV, nor does it acknowledge the existing studies that have documented the implications of criminalization.*
- *Second, the quantitative approach employed relies on a form of logic that reinforces assumptions about the criminal law's rationality and neutrality in a way that is potentially troubling, as it fails to recognize two important factors that have been explored by social science researchers: the ways in which criminal laws and courts can be highly irrational and contingent; and historically how criminal laws have been organized around the regulation, control, and incapacitation of populations (e.g., people of color, people with disabilities, people who live in poverty, gay, lesbian, and trans people, and people who live with forms of communicable disease, among others).*
- *Third, Sweeney et al. noted that 'state governments have been encouraged to review criminal laws to ensure they reflect current science on transmission risk as well as further public interest and public health'. To strengthen this observation, they might have also acknowledged law reform efforts, now underway in many jurisdictions, led by those living with, and most affected by, HIV.*

Sah P, Fitzpatrick MC, Pandey A, Galvani AP. HIV criminalization exacerbates subpar diagnosis and treatment across the United States: response to the 'Association of HIV diagnosis rates and laws criminalizing HIV exposure in the United States'. *AIDS*. 2017;31(17):2437-2439.

Note: This letter was a response to Sweeney et al. (2017) who assessed the relationship between HIV and stage 3 (AIDS) diagnosis data from the National HIV Surveillance System and the presence of a state criminal exposure law and found 'no association between HIV or AIDS diagnosis rates and criminal exposure laws across states over time'. The authors of the correspondence letter conducted the analysis described in Sweeney et al., but stratified the diagnosis rate into two response variables: the proportion of PLHIV diagnosed and annual percentage change in HIV prevalence. The data required for the replication of the results, and the relevant analysis code, are provided at <https://github.com/prathasah/US-law-and-HIV>. The authors found that their analyses indicate that laws criminalizing HIV exposure are associated with lower proportion of HIV diagnosis, counter to the conclusions of Sweeney et al. *"Our analyses here underscore the importance of distinguishing between the impact of laws on HIV diagnosis and HIV transmission, as their combined effect on HIV diagnosis rate could be confounding and misleading. Our evaluations of these distinct outcomes demonstrate that laws criminalizing HIV exposure have a negative association with HIV testing and a positive association with increasing HIV prevalence."*

Sykes BL, Hoppe TA, Maziarka KD. Cruel intentions? HIV prevalence and criminalization during an age of mass incarceration, U.S. 1999 to 2012. *Medicine (Baltimore)*. 2016;95(16):e3352. PMC4845822.

A 2014 U.S. Department of Justice Best Practices Report advocates that states eliminate HIV-specific criminal penalties except under 2 conditions: when a human immunodeficiency virus (HIV)-positive person intentionally commits a sex crime or transmits the virus by engaging in behavior that poses a significant risk of transmission, regardless of actual transmission. We assess the premise of these exceptions to understand whether these best practices are based on scientific evidence about the population at risk of infection and the risk of sexual violence by HIV-positive individuals. We employ nationally representative, cross-sectional survey data from the Current Population Survey (CPS), the Survey of Inmates in State, Federal, and Local Jails (SISFLJ), and the National Health and Nutrition Survey (NHANES). Data from the CPS, SISFLJ, and NHANES

are weighted and combined to analyze bias in the population at risk of HIV. Linear probability models are employed to estimate the likelihood that HIV-positive inmates are incarcerated for violent or sexual offenses, net of socioeconomic factors. We find significant measurement bias in HIV prevalence rates. The selection of national surveys for population denominators distorts contemporary estimates of HIV prevalence by 7% to 20%. Our findings also illustrate that HIV-positive inmates are 10 percentage-points less likely to be incarcerated for violent offenses than HIV-negative inmates. National best practice guidelines may undermine effective social policy that aims to curtail stigma within HIV-positive communities because scientific evidence neither include inmates into prevalence denominators (as a measure of the population at risk) nor assess the likelihood that HIV-positive inmates commit violent or sexual crimes.

Wise DL. *Criminal penalties for non-disclosure of HIV-positive status: Effects on HIV testing rates and incidence* [dissertation]. Kansas City, MO: Department of Psychology, University of Missouri-Kansas City; 2008.

This research examined whether laws criminalizing non-disclosure of HIV-positive status affects HIV testing rates and incidence. An interrupted time-series design was used. Totals of monthly HIV tests, confidential and anonymous tests, incidence, and tests with reported risk were collected from state health departments with (i.e., New Jersey, California, and Virginia) and without (i.e., North Carolina, Oregon, and Texas) criminal laws. ARIMA Models had low R-bar squared values, yet graphically fit the data well, and yielded white noise residuals. Significant abrupt and permanent changes were found to coincide with enactment of the laws in New Jersey, with total monthly tests and total monthly confidential tests increasing, and monthly tests for persons not reporting risk factors decreasing on the month of enactment of the law. Incidence decreased at 6 month delay from enactment of the New Jersey law. In Virginia, total monthly tests increased at the time of the enactment of the law. There were no changes in testing or incidence detected within California. In an effort to discover and control for the possible confounds of historical events, data were aggregated by month across non-intervention states. The non-intervention variable was a consistent and highly significant control variable for the intervention time-series analyses. While it is possible that these laws stimulated testing, improved effectiveness of treatment and the subsequent dissemination of information regarding the positive effect of treatment on health outcomes may be the likely reason for any overall increases in HIV testing that we have detected in this study. We found no change in testing among people at risk. Upon learning of the law, a subset of the population (in this case those testing but not reporting risk behaviors) may have decided against future testing. While it is possible that the law led to a decrease in participation in risk behavior, thus leading to a decrease in incidence, it is also possible that the decrease in incidence found in New Jersey indicates an overall reduction in testing among persons at-risk for HIV. Uniformity of data collection, management, and accessibility across states would enable more comprehensive examinations of effects of policy on HIV testing.

Woody A, Braitman AL, Derlega VJ, Winstead BA, Neilson B. Motivations for Punishing Someone Who Violates HIV Nondisclosure Laws: Basic Research and Policy Implications. *Analyses of Social Issues and Public Policy*. 2015;15(1):127-159.

Many U.S. states have HIV nondisclosure laws that require HIV-positive persons to disclose their HIV status to new sexual partners. Mandating HIV disclosure before sexual activity occurs is intended to deter unsafe sexual behavior and to reduce the risk of HIV transmission. HIV nondisclosure laws are also intended to punish HIV-positive persons who violate these laws. Vignettes were used to examine if participants are motivated to punish someone who violates these HIV nondisclosure laws. In three studies, we found that retribution but not general deterrence was used to recommend punishment, especially when HIV nondisclosure was associated with harm being done to sexual partners. We also found that preventing the law violator from reoffending played a role in recommending punishment, especially if the law violation was associated with considerable harm. On the other hand, the expression of an apology to sexual partners was associated with less severe punishment, based on the assessment that there was a relatively low risk of the HIV law violator repeating this crime and, therefore, lower importance for removing him from society. The findings suggest that persuading the general public and legislators to end the criminalization of HIV nondisclosure will be an uphill battle.

Canada

Adam BD, Corriveau P, Elliott R, Globerman J, English K, Rourke S. HIV disclosure as practice and public policy. *Crit Public Health*. 2015;25(4):386-397. PMC4536943.

Responses to the largest surveys of HIV-positive people in Ontario show that most either disclose to or do not have partners who are HIV-negative or of unknown status. Non-disclosure strategies and assumptions are reported by relatively small sets of people with some variation according to employment status, sexual orientation, gender, ethnicity, and having had a casual partner. Interviews with 122 people living with HIV show that disclosure is an undertaking fraught with emotional pitfalls complicated by personal histories of having misread cues or having felt deceived leading up to their own sero-conversion, then having to negotiate a stigmatized status with new people. In gay communities, constructions of the self as individual actors in a marketplace of risk co-exist with the sexual etiquette developed throughout the AIDS era of care of the self and other through safer sex. Among heterosexual populations, notions of responsibility show some divergence by gender. The findings of this study suggest that the heightened pressure of criminal sanction on decision-making about disclosure in personal interactions does not address difficulties in HIV transmission and is unlikely to result in enhanced prevention.

Adam BD, Globerman J, Elliott R, Corriveau P, English K, Rourke S. HIV positive people's perspectives on Canadian criminal law and non-disclosure. *Canadian Journal of Law & Society/La Revue Canadienne Droit et Société*. 2016;31(1):1-23.

The largest survey to date of people living with HIV regarding attitudes toward criminalization of HIV non-disclosure, this study investigates: sources of legal information available to HIV-positive people; perceptions of how criminal prosecutions and media coverage affect understanding of rights and responsibilities of self and others; and where HIV-positive people themselves stand on the role the criminal justice system should play. While mainstream media constructions of criminal iconography do affect PHA views, those who have higher levels of formal education, are active in the dating scene, and have been living longer with HIV hold less punitive views than those who do not. While the overall pattern of agreement on where to draw the line in criminal prosecution holds regardless of demographic characteristics, there is some statistically significant variation in degree of punitiveness according to sexual orientation and gender as well.

Adam BD, Elliott R, Corriveau P, English K. Impacts of criminalization on the everyday lives of people living with HIV in Canada. *Sexuality Research and Social Policy*. 2014;11(1):39-49.

Over the last decade, there have been a rising number of prosecutions for nondisclosure of HIV status along with heightened media attention to the issue in Canada. One hundred twenty-two people living with HIV were interviewed concerning the effects of criminalization on their sense of personal security and their romantic and sexual relationships. The largest number of respondents believe that criminalization has unfairly shifted the burden of proof so that they: are held to be guilty until proven innocent; are now caught in a difficult he-said/(s)he-said situation of having to justify their actions, disgruntled partners now have a legal weapon to wield against them regardless of the facts and the onus now falls on women whose male partners could ignore their wishes regarding safer sex. In terms of general impact, many respondents report: a heightened sense of uncertainty, fear or vulnerability, but others feel that the climate of acceptance is still better than in the early days of the epidemic or that the prosecution of the high profile cases is justified. The increasing focus of the court system on penalizing non-disclosure is having counter-productive or unanticipated consequences that can run contrary to the ostensible objective of discouraging behaviour likely to transmit HIV.

Adam BD, Elliott R, Husbands W, Murray J, Maxwell J. Effects of the criminalization of HIV transmission in *Cuerrier* on men reporting unprotected sex with men. *Canadian Journal of Law & Society/La Revue Canadienne Droit et Société*. 2014;23(1-2):143-159.

This paper reports on the perceptions and practices of men who have frequent unprotected sex with men in a socio-legal environment defined by the 1998 decision of the Supreme Court of Canada in *R. v. Cuerrier*. HIV-positive people are increasingly finding themselves in court since *Cuerrier*, and many are trying to take account of legal reasoning in their own conduct. The judicial construction of behaviour likely to transmit HIV relies on a set of presumptions concerning individual responsibility, rational and contractual interaction, and consenting adults that raises a series of ambiguities and uncertainties among HIV-positive people attempting to implement them in everyday life. While some express support for the reasoning in *Cuerrier*,

others struggle with practical dilemmas in sexual interaction, and a minority strand of ethical reasoning advances a “buyer beware” principle. This latter view occurs in a social environment where HIV-positive people experience strong disincentives to disclose in the face of potential rejection or discrimination once their sero-status is known. Examination of the social consequences of Cuerrier raises questions about the viability of relying on the enforcement of disclosure, through threat of criminal prosecution, as an effective method of HIV prevention, especially when most practical, day-to-day HIV prevention occurs when safer sex is practised consistently regardless of disclosure.

Barreto DFL. *The impact of structural inequities and interpersonal violence on food security and HIV care among women living with and affected by HIV in a Canadian setting* [master's thesis]. Vancouver, Canada: School of Population and Public Health, University of British Columbia; 2017.

BACKGROUND: Women living with HIV (WLWH) and sex workers (SWs) are priority populations for HIV prevention, diagnosis, treatment, and care. There is limited research into the impacts of structural (e.g., laws) and interpersonal violence (i.e., physical, sexual, verbal) on access to necessities (e.g., food, housing), HIV treatment, or the relationship between violence and HIV stigma. This thesis investigated the role of structural and interpersonal violence in an environment of HIV non-disclosure criminalization, in food insecurity among SWs living with and affected by HIV, and in antiretroviral (ART) adherence. **METHODS:** Data were drawn from two community-based prospective cohort studies, An Evaluation of Sex Workers' Health Access (AESHA) and Sexual Health and HIV/AIDS: Women's Longitudinal Needs Assessment (SHAWNA). Bivariate and multivariable logistic regression were used to examine the correlates of physical and/or verbal violence due to HIV disclosure without consent among WLWH in the SHAWNA cohort. Bivariate and multivariable logistic regression using generalized estimating equations (GEE) were used to model correlates of food insecurity among SWs in the AESHA cohort. Finally, a multivariable confounder model was created to assess the independent relationship between ART adherence and physical and/or sexual violence for WLWH in the SHAWNA cohort. **RESULTS:** Among 255 WLWH enrolled in SHAWNA between 2010-2016, bivariate and multivariable logistic regression showed that WLWH who were “outed” had elevated odds of experiencing physical and/or verbal violence (Objective 1). In AESHA, among 761 SWs living with or affected by HIV between 2010-2014, bivariate and multivariable logistic regression using GEE revealed increased odds of food insecurity for SWs who experienced physical and/or sexual violence (Objective 2). Among 250 WLWH enrolled in SHAWNA between 2014-2017, bivariate and multivariable logistic regression using GEE found decreased odds of optimal ART adherence among WLWH who experienced physical and/or sexual violence (Objective 3). **CONCLUSIONS:** Structural and interpersonal violence are important factors in the health needs and outcomes of SWs and WLWH. Universally applied trauma-informed care by primary healthcare providers is crucial. The decriminalization of sex work and HIV non-disclosure must be a priority. Given the high proportion of Indigenous women represented in this thesis, culturally relevant programming must be accessible.

Gaspar M. *Conditions of uncertainty: the social and political dimensions of risk management in the transition to the biomedical era of HIV prevention* [dissertation]. Montréal, Canada: Department of Humanities, Centre for Interdisciplinary Studies in Society and Culture, Concordia University; 2017.

The HIV prevention field in Canada has failed to achieve a stabilising point, a lack of consensus on the effectiveness of risk management strategies, in its third decade, the transition to the biomedical era of HIV prevention. Under these conditions of uncertainty we have witnessed epistemic and social and political uncertainties proliferate. Experts debate long-standing and emerging prevention strategies. Newly produced knowledge complicates our understanding of gay male HIV prevention but often lacks appropriate validity and generalizability. Governing practices are implemented to respond to this knowledge, but in conflicting ways. For everyday social actors, these uncertainties morph into complicated forms of experiential uncertainty. I first present this dissertation as a work of critical social science on HIV. Drawing from critical studies on risk and uncertainty I then produce an original analytic framework termed the uncertainty triad. I then examine biomedical and public health research and critical perspectives on gay male HIV prevention, arguing that the field cultivates uncertainty to “beat-up” the epidemic. I then present data from 33 in-depth interviews conducted with young HIV-negative gay men to discuss their everyday confrontations with serostatus uncertainty (an inability to confirm one's HIV-negativity). This is a move away from analysing motivations for condomless anal sex and focusing exclusively on “high risk men.” To avoid exclusively tapping into the HIV epistemic community, the interviewees hadn't previously participated in a research interview about HIV and had no

regular involvement with an AIDS service organisation. I then present an original theory on risk disposition, which investigates a social actor's processes of risk reflexivity and his tolerance to serostatus uncertainty. Social conditions affecting the experiences of health maintenance, institutional navigation and sexual practice can shape tolerance to serostatus uncertainty by minimising or fostering anxiety. Drawing on the notion of sexual practice over sexual behaviour, I then examine HIV-negative gay men's confrontations with HIV-related ethico-political challenges such as HIV stigma, serosorting and the criminalisation of HIV non-disclosure. I argue that biomedical optimism does not necessarily lead to the abandonment of condoms among HIV-negative gay men and that many remain sceptical of the prevention benefits of HIV treatments.

Greene S, Ion A, Kwaramba G, Lazarus L, Loutfy M. Surviving surveillance: How pregnant women and mothers living with HIV respond to medical and social surveillance. *Qual Health Res.* 2017;1049732317725219.

Pregnant women and mothers living with HIV are under surveillance of service providers, family members, and the community at large. Surveillance occurs throughout the medical management of their HIV during pregnancy, preventing HIV transmission to their baby, infant feeding practices, and as part of assessments related to their ability to mother. Enacted and anticipatory HIV-related stigma can exacerbate the negative impact that being under surveillance has on mothers living with HIV as they move through their pregnancy, birthing, and mothering experiences. In response, women living with HIV find ways to manage their experiences of surveillance through engaging in acts of distancing, planning, and resisting at different points in time, and sometimes enacting all three practices at once. Positioning the narratives of pregnant women and mothers living with HIV in relation to their experiences of surveillance illuminates the relationship between the surveillance of mothers living with HIV and HIV-related stigma.

Note: In the context of criminalization, the article includes quotes by mothers living with HIV that suggests that *"while it is not considered 'criminal' for a woman living with HIV to become a mother, her pregnant body may raise questions about her method of conception and the possibility of nondisclosure of her HIV status."*

Harrigan MC. HIV Testing in the context of HIV stigma and minority stress [master's thesis]. Waterloo, Canada: Department of Psychology, Wilfrid Laurier University; 2016.

The HIV test is highly valued for its role in promoting personal health, aiding in HIV prevention, and enabling the epidemiological tracking of the virus. However, relatively few scholars have critically examined the social and cultural implications of testing practices (Scott, 2003). These implications are of particular concern because the groups targeted for testing (referred to as service priority groups) are marginalized communities, and have historically been further marginalized by many public health HIV prevention efforts (Waldby, 1996). This thesis examines the experience of receiving an HIV test from the perspective of individuals in service priority groups, which include gay, bisexual, and other men who have sex with men, trans people, African, Caribbean, and Black individuals, Indigenous communities, and people who use injection drugs. The study design and analysis is informed by HIV stigma theory (Parker & Aggleton, 2003) and minority stress theory (Meyer, 2003). Eighteen participants were interviewed following HIV testing and asked about their experiences receiving the test, and engaged in discussion about minority stress and HIV stigma. Analysis revealed that many participants found HIV testing to be stressful, and that this stress was related to being part of a "high risk" group. Individuals who had faced significant discrimination in their lives found the test more stressful than those who had experienced minimal discrimination. Additionally, those who held very negative opinions about HIV were more worried about the test compared to those for whom HIV was less stigmatized. Implications and recommendation for service providers and policymakers are discussed.

Kapiriri L, Tharao W, Muchenje M, Masinde KI, Ongoiba F. ' ... They should understand why ... ' The knowledge, attitudes and impact of the HIV criminalisation law on a sample of HIV+ women living in Ontario. *Glob Public Health.* 2016;11(10):1231-1245.

Over 60 countries criminalise 'the "willful" transmission of HIV'. Such a law has the potential to hinder public health interventions. There is limited literature discussing the perceptions of this law and the impact, it has had on HIV-positive women. This paper describes the knowledge of and attitudes of this law by HIV-positive women living in Ontario; and their experiences with its application. Three group discussions (n = 10) and 17 in-depth interviews with HIV-positive women age: 21-56 years. Data were analysed using a modified thematic approach. Most of the respondents knew about the law with regard to adult HIV transmission.

However, very few knew about any laws related to mother to child HIV transmission, although some reported having had their children taken away because of breastfeeding. Respondents felt that the law could be fair and protective if there were means of providing a priori support to those women who have been disadvantaged social-culturally and structurally. Without this support, the law could potentially lead HIV-positive women into hiding and not accessing services that could help them. There is need for the law implementers to consider these findings if they are to support the public health efforts to control HIV.

Karago-Odongo JW. *Immigrant women living with HIV/AIDS: Their barriers as experienced by service providers* [master's thesis]. Toronto, Canada: Program of Immigration and Settlement Studies, Ryerson University; 2008.

A review of statistics on HIV infection in Canada shows that the rates of HIV infection are on the rise among immigrants. Like other newcomers in Canada, immigrants living with or affected by HIV/AIDS seek services from various agencies serving immigrants. The purpose of this study is to identify and highlight barriers experienced by service providers when dealing with immigrants and particularly immigrant women who are living with HIV/AIDS. Some of the barriers they experienced include stigma, denial, fear, and discrimination, as well as socio-cultural and religious beliefs, economic and structural factors like immigration status, racism, marginalization and language.

Note: In the context of criminalization, participants who were interviewed in the study *"observed that the fear of criminalizing of AIDS may cause more people to stay away from services as they do not wish to disclose their status."* Participants also expressed concern that women can potentially face criminal charges for exposing their newborns to HIV through breastfeeding. *"This is because within some cultures breastfeeding is expected and when a woman does not breastfeed she would have to give a reason to her friends and family or they would suspect her reason for not breastfeeding as being HIV positive which might mean disclosing her HIV status."*

Kesler MA. *The impact of sexual behaviours, risk perceptions and the criminalization of HIV non-disclosure on HIV transmission among HIV-negative and HIV-positive men who have sex with men in Toronto* [dissertation]. Toronto, Canada: School of Public Health, University of Toronto; 2017.

Background: Men who have sex with men (MSM) continue to have disproportionately high rates of human immunodeficiency virus (HIV), even though risk factors for HIV acquisition are known and antiretroviral treatment has reduced transmission. Objectives: To characterize the sexual behaviours and risk perceptions of HIV transmission among HIV-negative and HIV-positive MSM. Methods: 150 HIV-negative and 292 HIV-positive MSM participated in the STI/HIV Co-Infection Study between September 2010 and June 2012. Participants were recruited from the Maple Leaf Medical Clinic, a primary and HIV-related care centre in Toronto. Multivariable logistic regression (MLR) models quantified the relationships between actual sexual HIV risk, HIV incidence risk index for MSM (HIRI-MSM), perceived HIV risk and willingness to take pre-exposure prophylaxis (PrEP) among HIV-negative MSM. MLR and flow chart models were used to estimate the potential impact of HIV non-disclosure laws on HIV testing rates and transmission among HIV-negative MSM, and on condom use, HIV status disclosure and proportion at risk for criminal prosecutions among HIV-positive MSM. Results: As condom use frequency with HIV-positive regular partners decreased, perceived HIV risk (Odds Ratio (OR):18.33, 95% Confidence Interval (CI):1.65-203.45) and willingness to take PrEP (OR:27.11, 95% CI:1.33-554.43) increased. Condom use frequency with casual or HIV-unknown status regular partners and the HIRI-MSM index were not associated with perceived HIV risk or PrEP willingness. The 7% (9/124) reduction in HIV testing due to fear of prosecution found in this study could increase community HIV transmission by 18.5%; the majority of transmission being driven by the unmet needs of undiagnosed HIV-positive MSM. Almost half of HIV-positive MSM were more likely to use condoms and/or disclose their HIV-positive status due to fear of prosecution and 8.6% (25/292) could be at risk for non-disclosure prosecutions given their condom use, viral load and disclosure rates. Conclusions: HIV-negative MSM using condoms less frequently with HIV-positive partners but not with HIV-unknown status or casual partners accurately gauged their sexual risk behaviour and were willing to take PrEP. HIV non-disclosure laws may incentivize safer sex practices among HIV-positive MSM; however, they may also deter HIV testing which impedes HIV prevention efforts and increases community HIV transmission.

Kesler MA, Kaul R, Loutfy M, Myers T, Brunetta J, Remis RS, Gesink D. Prosecution of non-disclosure of HIV status: Potential impact on HIV testing and transmission among HIV-negative men who have sex with men. *PLoS One*. 2018;13(2):e0193269.

BACKGROUND: Non-disclosure criminal prosecutions among gay, bisexual and other men who have sex with men (MSM) are increasing, even though transmission risk is low when effective antiretroviral treatment (ART) is used. Reduced HIV testing may reduce the impact of HIV "test and treat" strategies. We aimed to quantify the potential impact of non-disclosure prosecutions on HIV testing and transmission among MSM. METHODS: MSM attending an HIV and primary care clinic in Toronto completed an audio computer-assisted self-interview questionnaire. HIV-negative participants were asked concern over non-disclosure prosecution altered their likelihood of HIV testing. Responses were characterized using cross-tabulations and bivariate logistic regressions. Flow charts modelled how changes in HIV testing behaviour impacted HIV transmission rates controlling for ART use, condom use and HIV status disclosure. RESULTS: 150 HIV-negative MSM were recruited September 2010 to June 2012. 7% (9/124) were less or much less likely to be tested for HIV due to concern over future prosecution. Bivariate regression showed no obvious socio/sexual demographic characteristics associated with decreased willingness of HIV testing to due concern about prosecution. Subsequent models estimated that this 7% reduction in testing could cause an 18.5% increase in community HIV transmission, 73% of which was driven by the failure of HIV-positive but undiagnosed MSM to access care and reduce HIV transmission risk by using ART. CONCLUSIONS: Fear of prosecution over HIV non-disclosure was reported to reduce HIV testing willingness by a minority of HIV-negative MSM in Toronto; however, this reduction has the potential to significantly increase HIV transmission at the community level which has important public health implications.

Kilty JM, Orsini M. Confessional technologies and the will to disclose: mobilizing emotions and lived experience in AIDS service organizations in Canada. *Sexuality Research and Social Policy*. 2017.

This research highlights how frontline workers in the HIV/AIDS sector in Canada mobilize the confessional as a technology of governance to encourage changes in the sexual health and safety and disclosure practices of HIV-positive men and women. The ways in which frontline workers counsel clients are especially important in light of Canada's aggressive growth in criminal prosecutions against individuals for failing to disclose their HIV status to sexual partners. Drawing on 62 semi-structured interviews with AIDS service organization (ASO) staff from across Canada, we suggest that the work performed by ASO workers constitutes a form of bioethics on the ground, which is rooted in both the worker's and the client's lived experiences of HIV. It can be especially fraught if the lived experience is mobilized in ways that are ultimately disempowering for clients who do not relate to the individual's disclosure narrative.

Kilty JM, Bogosavljevic K. Emotional storytelling: Sensational media and the creation of the HIV sexual predator. *Crime, Media, Culture: An International Journal*. 2018;0(0):1741659018773813.

More than 180 people in Canada have faced criminal charges related to HIV nondisclosure. Media coverage is often sensational and commonly portrays people living with HIV as hypersexualized threats to the (inter)national body politic. This article analyzes mainstream news media coverage of four HIV nondisclosure cases to examine how the accused (two men, two women) are constructed as sexual predators, which we found occurs through two key discursive moves. First, by tying the narrative to stereotypical conceptualizations of hegemonic and toxic masculinity and pariah femininity to construct the individual as promiscuous, hypersexual and dangerous. Second, by crafting a narrative that evokes complex moral emotions; notably, these include the 'negative' emotions of anger, disgust and fear. Given that racialized men are disproportionately represented and demonized in media accounts, and the tense race relations in the current western political landscape, it is important to consider how emotions (rather than medical evidence of the risks of transmission, intent to infect or actual transmission) might contribute to shaping punitive mentalities and the harsh application of the law. By examining how race, gender, class and sexuality are mobilized to construct narratives of Black masculinity as inherently toxic and women's sexual freedom as exemplifying pariah femininity, and the ways in which the coverage evokes negative moral emotions, we contend that media coverage shores up moralized discourses about sexuality, masculinity and femininity and HIV/AIDS.

Knight R, Krusi A, Carson A, Fast D, Shannon K, Shoveller J. Criminalization of HIV non-disclosure: Narratives from young men living in Vancouver, Canada. *PLoS One*. 2018;13(7):e0201110. PMC6057679

BACKGROUND: Previous research has identified the impacts of legal frameworks that criminalize HIV non-disclosure among people living with HIV (e.g., elevated stigma and violence). However, far less is known about the perspectives or experiences of people-particularly, men-who are HIV-seronegative or who are unaware of their status. The objective of this paper is to describe the health and social risks that young men perceive to be associated with an HIV diagnosis in the context of Canada's current legal framework pertaining to HIV non-disclosure. **METHODS:** We analyzed data from 100 in-depth interviews (2013-2016) conducted with 85 young men ages 18-30 in Vancouver on the topic of the criminalization of HIV non-disclosure. **RESULTS:** Our analysis revealed two dominant narratives in relation to HIV criminalization: (a) interrogation and (b) justification. An interrogation narrative problematized the moral permissibility of criminalizing HIV non-disclosure. In this narrative, Canada's HIV non-disclosure legal framework was characterized as creating unjust barriers to HIV testing uptake, as well as impeding access to and reducing retention in care for those living with HIV. Conversely, a justification narrative featured a surprising number of references to HIV as a "death sentence", despite effective treatments being universally available in Canada. However, most of those who presented the justification narrative asserted that the criminalization of HIV non-disclosure was morally justified in light of the perceived negative stigma-related impacts of HIV (e.g., discrimination; being ostracized from sex or romantic partners, friends, family). The justification narrative often reflected a belief that the legal framework provides both punishment and deterrence, which were perceived to supersede any barriers to care for both HIV-positive and -negative individuals. **CONCLUSION:** Public education regarding contemporary medical advances in HIV may help contest lay understandings of HIV as a "death sentence", which is particularly relevant to destabilizing justification narratives. However, significant strengthening of HIV stigma-reduction efforts will be needed to move society away from narratives that attempt to justify Canada's current HIV non-disclosure legal framework.

Larcher AA, Symington A. *Criminals and victims? The impact of the criminalization of HIV non-disclosure on African, Caribbean and Black Communities in Ontario*. African and Caribbean Council on HIV/AIDS in Ontario (ACCHO); 2010. Available at:

http://www.accho.ca/Portals/3/documents/ACCHO_Criminals_and_Victims_Nov2010_LoRes.pdf.

Under Canadian law, a person living with HIV may be guilty of a crime for not disclosing his or her HIV-positive status before engaging in behaviours that pose a "significant risk" of serious bodily harm, namely sexual activities where HIV transmission is possible. In Ontario alone, since 1989 more than 50 individuals have been criminally charged for HIV nondisclosure. There has been an increase over time in the average number of cases each year, with a sharp increase beginning in 2004. Paralleling this increase in the number of charges laid, there has been an escalation in the severity of those charges, the media coverage surrounding the cases, and the anxiety and debate within the HIV community about this use of the criminal law with respect to HIV. This discussion paper explores both the expanding and expansive use of the criminal law to punish behaviours that risk transmitting HIV, and the impacts of criminalization of HIV non-disclosure, as they relate to African, Caribbean and Black (ACB) communities in Ontario. While there have been various initiatives to examine the implications of criminalization of HIV non-disclosure in Ontario and to challenge this use of the criminal law, to date little attention has been paid to its impacts on members of ACB communities. This paper acknowledges that racism is one of the most pervasive forms of systemic oppression shaping social relations in Ontario, and presents an original analysis of the race-related dimensions of the criminalization of HIV non-disclosure. It highlights how people living with HIV (PHAs) within ACB communities experience multiple forms of oppression, and explores how the criminalization of HIV nondisclosure intersects with this oppression. It is the first analysis, albeit preliminary, of criminalization of HIV non-disclosure as experienced by ACB communities and suggests possible future initiatives that respond to these priorities.

Liboro RM, Walsh RT. Understanding the irony: Canadian gay men living with HIV/AIDS, their Catholic devotion, and greater well-being. *J Relig Health*. 2016;55(2):650-670.

Nine Canadian Catholic HIV-positive gay men were interviewed to obtain a better understanding of why and how they were able to persevere in their faith despite their religion's teachings against homosexuality and contributions to the stigmatization of HIV/AIDS. By examining the lived experiences and personal perspectives of the participants, the study aimed to explore and elucidate the significant role of Catholicism and the Catholic

Church both as a continued source of marginalization and oppression, as well as strength and support, for Canadian gay men living with HIV/AIDS today.

Note: In the context of criminalization, study participants feel that the legal duty to disclose HIV-positive status poses "*the pressure to disclose became overwhelming*" and connect it with experiences of being rejected by sexual partners.

Mykhalovskiy E. The problem of "significant risk": exploring the public health impact of criminalizing HIV non-disclosure. *Soc Sci Med.* 2011;73(5):668-675.

Using criminal law powers to respond to people living with HIV (PHAs) who expose sexual partners to HIV or transmit the virus to them is a prominent global HIV public policy issue. While there are widespread concerns about the public health impact of HIV-related criminalization, the social science literature on the topic is limited. This article responds to that gap in knowledge by reporting on the results of qualitative research conducted with service providers and PHAs in Canada. The article draws on a studies in the social organization of knowledge perspective and insights from critical criminology and work on the "medico-legal borderland." It investigates the role played by the legal concept of "significant risk" in coordinating criminal law governance and its interface with public health and HIV prevention. In doing so, the article emphasizes that exploring the public health impact of criminalization must move past the criminal law--PHA dyad to address broader social and institutional processes relevant to HIV prevention. Drawing on individual and focus group interviews, this article explores how criminal law governance shapes the activities of providers engaged in HIV prevention counseling, conceptualized as a complex of activities linking clinicians, public health officials, front-line counselors, PHAs, and others. It emphasizes three key findings: (1) the concept of significant risk poses serious problems to risk communication in HIV counseling and contributes to contradictory advice about disclosure obligations; (2) criminalization discourages PHAs' openness about HIV non-disclosure in counseling relationships; and (3) the recontextualization of public health interpretations of significant risk in criminal proceedings can intensify criminalization.

Mykhalovskiy E, Betteridge G. Who? What? Where? When? And with what consequences? An analysis of criminal cases of HIV non-disclosure in Canada. *Canadian Journal of Law & Society/La Revue Canadienne Droit et Société.* 2012;27(1):31-53.

The use of criminal-law powers to respond to people with HIV who place others at risk of HIV infection has emerged as a focal point of AIDS advocacy at global, national, and local levels. In the Canadian context, reform efforts that address the criminalization of HIV non-disclosure have been hampered by the absence of data on the contours, scale, and outcomes of criminalization. This article responds to that gap in knowledge with the first comprehensive analysis of the temporal trends, demographic patterns, and aggregate outcomes of Canadian criminal cases of HIV non-disclosure. The authors draw on insights into the role that rendering social phenomena in numerical terms plays for the governance of social life in order to make criminalization "visible" in ways that might contribute to activist responses. The article examines temporal trends, demographic patterns, and outcomes separately. In each instance, the pattern or trend identified is described, potential explanations for findings are offered, and an account is given of how the data have informed efforts to reform criminal law. Particular attention is paid to the following key findings: a sharp increase in criminal cases that began in 2004; the large proportion of recent criminal cases involving defendants who are heterosexual Black, African, and Caribbean men; and the high proportion of criminal cases resulting in conviction. The article closes with suggestions for future research.

Mykhalovskiy E, Betteridge JG, McLay D. *HIV non-disclosure and the criminal law: establishing policy options for Ontario. A report funded by a grant from the Ontario HIV Treatment Network; 2010.* Available at: <http://www.catie.ca/pdf/Brochures/HIV-non-disclosure-criminal-law.pdf>.

This report contributes to the development of an evidence-informed approach to using the criminal law to address the risk of the sexual transmission of HIV in the province of Ontario. In recent years, the application of criminal law powers to circumstances of HIV exposure in sexual relations has emerged as a key HIV-related policy issue. In Ontario, people living with HIV/AIDS (PHAs), AIDS Service Organizations (ASOs), human rights advocates and others have raised concerns about the expansive use of the criminal law in addressing HIV-related sexual offences. They have raised questions about fairness in the application of the criminal law and about its negative consequences for PHAs and established public health and community-based HIV

prevention strategies. This report is rooted in these concerns. It responds to them in two ways. First, it explores various forms of evidence relevant to a thorough policy consideration of the use of the criminal law in circumstances of sexual exposure to HIV. Second, it proposes policy options for addressing the problems posed by the criminalization of HIV non-disclosure in Ontario.

Mykhalovskiy E, Hastings C, Sanders C, Hayman M, Bisailon L. 'Callous, cold and deliberately duplicitous': racialization, immigration and the representation of HIV criminalization in Canadian mainstream newspapers. Toronto, Canada: A report funded by a grant from the Canadian Institutes of Health Research Centre for Social Research in HIV Prevention; 2016. Available at: http://www.accho.ca/Portals/4/documents/Callous_Cold_Duplicitous_2016.pdf.

This report explores mainstream Canadian newspaper coverage of HIV non-disclosure criminal cases in Canada. It pays particular attention to how defendants' race and immigration status figure into the newspaper representations of such cases. We empirically enquire into claims made by African, Caribbean and Black (ACB) activists, people living with HIV, and AIDS service organizations (ASOs) that ACB people living with HIV are negatively portrayed and overrepresented in Canadian newspaper stories about criminal HIV non-disclosure cases (ACCHO, 2010, 2013). Our analysis is based on what, to our knowledge, is the largest data set of news coverage of the issue: a corpus of 1680 English-language Canadian newspaper articles about HIV non-disclosure criminal cases in Canada written between 1 January 1989 and 31 December 2015. This is a scholarly report based on original theoretico-empirical research. It provides the first comprehensive and systematic quantitative and qualitative analysis of Canadian newspaper coverage of HIV criminalization.

Patterson S, Kaida A, Nguyen P, Dobrer S, Ogilvie G, Hogg R, Kerr T, Montaner J, Wood E, Milloy MJ. Prevalence and predictors of facing a legal obligation to disclose HIV serostatus to sexual partners among people living with HIV who inject drugs in a Canadian setting: a cross-sectional analysis. *CMAJ Open*. 2016;4(2):E169-176. PMC4933640.

BACKGROUND: In October 2012, the Canadian Supreme Court ruled that people living with HIV must disclose their HIV status before sex that poses a "realistic possibility" of HIV transmission, clarifying that in circumstances where condom-protected penile-vaginal intercourse occurred with a low viral load (< 1500 copies/mL), the realistic possibility of transmission would be negated. We estimated the proportion of people living with HIV who use injection drugs who would face a legal obligation to disclose under these circumstances. **METHODS:** We used cross-sectional survey data from a cohort of people living with HIV who inject drugs. Participants interviewed since October 2012 who self-reported recent penile-vaginal intercourse were included. Participants self-reporting 100% condom use with a viral load consistently < 1500 copies/mL were assumed to have no legal obligation to disclose. Logistic regression identified factors associated with facing a legal obligation to disclose. **RESULTS:** We included 176 participants, 44% of whom were women: 94% had a low viral load, and 60% self-reported 100% condom use. If condom use and low viral load were required to negate the realistic possibility of transmission, 44% would face a legal obligation to disclose. Factors associated with facing a legal obligation to disclose were female sex (adjusted odds ratio [OR] 2.19, 95% confidence interval [CI] 1.13-4.24), having 1 recent sexual partner ($v. > 1$) (adjusted OR 2.68, 95% CI 1.24-5.78) and self-reporting a stable relationship (adjusted OR 2.00, 95% CI 1.03-3.91). **INTERPRETATION:** Almost half the participants in our analytic sample would face a legal obligation to disclose to sexual partners under these circumstances (with an increased burden among women), adding further risk of criminalization within this marginalized and vulnerable community.

O'Byrne P, Gagnon M. HIV criminalization and nursing practice (special issue). *Aporia: The Nursing Journal*. 2012;4(2):16-26.

In this special edition of APORIA: The Nursing Journal, Dr. Patrick O'Byrne and Dr. Marilou Gagnon, two professors from the University of Ottawa's School of Nursing, outline, present, and discuss a recent project, which sought to better understand the ramifications of the current context of criminal prosecutions for nondisclosure of HIV status on nursing practice, whether in the treatment, prevention, or public health domains. As part of this work, which was fully funded by a Canadian Institutes of Health Research (CIHR) meeting grant, these two professors (who are also registered nurses themselves) helped to shed more light on the contemporary health care context surrounding HIV care and the legally sensitive topic of serostatus disclosure/nondisclosure. As is evident, even after a cursory review of this document, these preliminary

findings are a useful starting point for anyone wishing to better understand and/or further advance his/her general knowledge of this topic. Indubitably, one may discover useful material presented herein.

O'Byrne P, Bryan A. Anonymous HIV testing and public health in Ontario, Canada: understanding HIV surveillance. *Surveillance & Society*. 2013;11(1/2):35.

To date, there has been little research published about public health HIV surveillance, HIV testing, and HIV prevention. Accordingly, an exploratory project was undertaken, involving, firstly, a detailed review of local public health legislation and practice guidelines, and, secondly, the distribution of surveys about self-reported sexually transmitted infections (STI) and HIV testing/diagnosis, HIV testing practices, and sexual behaviours among gay, bisexual, and other men who have sex with men. A review of the public health law indicated that, in the local context, there is a pervasive public health surveillance apparatus that requires mandatory reporting of identified communicable diseases, including HIV. Results of the survey indicated that individuals who reported a preference for, or use of, anonymous HIV testing were more likely to have reported having: (a) been tested for, and diagnosed with, STIs; (b) prior STI/HIV diagnoses; and (c) a self-reported history of anal sex. These results highlighted that: (1) public health surveillance affects HIV testing and management practices; (2) that anonymous HIV testing is not truly anonymous; and (3) that HIV surveillance depends, in part, on individuals participating in the public health surveillance system. Accordingly, while knowing that one is HIV-positive can be beneficial (e.g., as a result of improved quantity and quality of life for people living with HIV), HIV testing is never free from surveillance. From this perspective, true avoidance of public health surveillance would require an absolute rejection of HIV testing.

O'Byrne P, Bryan A, Woodyatt C. Nondisclosure prosecutions and HIV prevention: results from an Ottawa-based gay men's sex survey. *J Assoc Nurses AIDS Care*. 2013;24(1):81-87.

This study examines the validity of the Supreme Court of Canada's claim that criminal prosecution of nondisclosure of HIV status would not undermine HIV prevention. In fact, the study found that "nondisclosure prosecutions likely undermine HIV prevention efforts and, consequently, exacerbate HIV transmission." Among the self-identifying gay, bisexual, and other men who have sex with men surveyed, 17% reported that nondisclosure prosecutions affected their willingness to get tested for HIV and almost 14% said these prosecutions made them fear discussing their sexual practices with health care providers. The study also found that individuals engaging in risky behavior are not seeking health care, which limits health care providers' ability to deliver counseling and other harm reducing interventions. The authors stress the need for additional quantitative and qualitative studies on STI and HIV testing and diagnoses rates to further understand the relationship between nondisclosure prosecutions and HIV prevention efforts.

O'Byrne P, Willmore J, Bryan A, Friedman DS, Hendriks A, Horvath C, Massenet D, Bouchard C, Remis RS, Etches V. Nondisclosure prosecutions and population health outcomes: examining HIV testing, HIV diagnoses, and the attitudes of men who have sex with men following nondisclosure prosecution media releases in Ottawa, Canada. *BMC Public Health*. 2013;13:94. PMC3637096.

BACKGROUND: During the past decade, the intersection of HIV and criminal law has become increasingly discussed. The majority of studies to date have approached this topic from a sociological or legal perspective. As a result, the potential effect of nondisclosure prosecutions on population health and HIV prevention work remains mostly unknown. **METHODS:** A descriptive quantitative-qualitative study was undertaken to examine HIV testing, HIV diagnoses, and the attitudes of men who have sex with men following regional media releases about a local nondisclosure prosecution. As part of this study, first, we reviewed the trends in HIV testing and HIV diagnoses from 2008 through 2011 in Ottawa, Canada. Second, we explored the attitudes and beliefs of local MSM about HIV, HIV prevention, HIV serostatus disclosure, nondisclosure prosecutions, and public health. **RESULTS:** Quantitatively, the findings of this study revealed that, in comparison to the period preceding the media releases about a local nondisclosure prosecution, HIV testing and HIV diagnoses among men who have sex with men did not significantly change after the media releases of interest. Qualitatively, a subgroup of 27 men who have sex with men (12 HIV-positive, 15 HIV-negative) noted their beliefs that the local public health department openly shares information about people living with HIV with the police. Moreover, some HIV-positive participants stated that this perceived association between the local public health department and police services caused them to not access public health department services,

notwithstanding their desires to seek assistance in maintaining safer sexual practices. **CONCLUSIONS:** Nondisclosure prosecutions likely undermine HIV prevention efforts.

O'Byrne P. Discussions about STI histories and HIV-statuses among Gay men in Ottawa: An HIV prevention analysis. *Can J Hum Sex.* 2018;27(1):79-91.

As part of examining the public health effects of media releases about HIV-status nondisclosure, a semi-structured interview technique was employed to collect data about gay men's perceptions of and experiences with HIV-status disclosure, nondisclosure, and prevention. In this article, participants' (N=27) narratives about their expectations of how and when HIV-status disclosure and discussions about STI histories should occur are presented, and then contrasted against stated (hypothetical) expectations with the stories they recounted about discussing HIV-status during previous sexual contacts (actual practices). These data highlight that the overwhelming socio-sexual norm among gay men in Ottawa is not to discuss HIV-status, and, instead, to perform HIV risk assessments based on the characteristics of their sexual partners and their relationships with these men. A small subset of participants, however, noted they used condoms to maintain what was called the code of silence (i.e., the norm not to discuss HIV), and to simultaneously minimize HIV transmission during sexual contacts with casual or anonymous partners. In light of the extant literature about STIs, HIV, and prevention among gay men, these data provide important insights for HIV prevention workers, who should consider how to tailor prevention efforts to local communities.

Pai NP, Smallwood M, Gulati D, Lapczak N, Musten A, Gaydos C, Johnston C, Steben M, Wong T, Engel N, Kim J. What do key stakeholders think about HIV self-testing in Canada? Results from a cross-sectional survey. *AIDS Behav.* 2017. 2017/04/26.

Human immunodeficiency virus (HIV) self-testing presents an empowering alternative to facility-based testing for reaching undiagnosed HIV infected individuals, but is not currently available in Canada. We surveyed stakeholders (clinical providers, public health professionals, researchers) engaged in HIV testing initiatives nationwide to identify the concerns, opportunities and challenges to implementing HIV self-testing in Canada. An online cross-sectional survey was disseminated by the Canadian Institutes of Health Research Centre for REACH 2.0 National HIV & sexually transmitted and blood borne infections working group to stakeholders nationwide, with a target sample size of 200. Quantitative and qualitative data were analyzed using a mixed-methods, respondent-informed approach, to inform subsequent HIV self-testing in a country where self-testing is not yet accessible. A total of 183 responses were received. A majority (70.7%) (128/181) felt that self-testing was a necessary investment to reach the undiagnosed. 64.6% (117/181) felt that self-tests should be made available to their clients and 71.5% (128/179) of respondents agreed that self-test instructions required improvements. However, 50% (90/180) felt that self-testing will pose an economic challenge to current HIV testing models. Regardless, 21% urged for timely action and availability of HIV self-tests. Thematic analyses reflected the following concerns: (a) need for affordable self-tests, (b) need for expedited, customized, and accessible linkages to counselling, (c) concern for patients to cope with positive self-test results, (d) accuracy of self-tests to detect acute HIV and (e) liability in the context of non-disclosure. Stakeholders agreed to the provision of an option of HIV self-testing to reach the undiagnosed individuals. Concerns regarding costs and accuracy of self-tests, expedited linkages to counselling, and integration of self-test within prevailing HIV testing models, will need to be addressed before their widespread implementation.

Patterson S, Kaida A, Ogilvie G, Hogg R, Nicholson V, Dobrer S, Kerr T, Shoveller J, Montaner J, Milloy MJ. Awareness and understanding of HIV non-disclosure case law among people living with HIV who use illicit drugs in a Canadian setting. *Int J Drug Policy.* 2017;43:113-121.

BACKGROUND: In 2012, the Supreme Court of Canada (SCC) ruled that people living with HIV (PLWH) could face criminal charges if they did not disclose their serostatus before sex posing a "realistic possibility" of HIV transmission. Condom-protected vaginal sex with a low (i.e., <1500copies/mL) HIV viral load (VL) incurs no duty to disclose. Awareness and understanding of this ruling remain uncharacterized, particularly among marginalized PLWH. **METHODS:** We used data from ACCESS, a community-recruited cohort of PLWH who use illicit drugs in Vancouver. The primary outcome was self-reported awareness of the 2012 SCC ruling, drawn from cross-sectional survey data. Participants aware of the ruling were asked how similar their understanding was to a provided definition. Sources of information from which participants learned about the ruling were determined. Multivariable logistic regression identified factors independently associated

with ruling awareness. RESULTS: Among 249 participants (39% female), median age was 50 (IQR: 44-55) and 80% had a suppressed HIV VL (<50copies/mL). A minority (112, 45%) of participants reported ruling awareness, and 44 (18%) had a complete understanding of the legal obligation to disclose. Among those aware (n=112), newspapers/media (46%) was the most frequent source from which participants learned about the ruling, with 51% of participants reporting that no healthcare providers had talked to them about the ruling. Ruling awareness was negatively associated with VL suppression (AOR:0.51, 95% CI:0.27,0.97) and positively associated with recent condomless sex vs. no sex (AOR:2.00, 95% CI:1.03,3.92). CONCLUSION: Most participants were not aware of the 2012 SCC ruling, which may place them at risk of prosecution. Discussions about disclosure and the law were lacking in healthcare settings. Advancing education about HIV disclosure and the law is a key priority. The role of healthcare providers in delivering information and support to PLWH in this legal climate should be further explored.

Patterson SE, Milloy MJ, Ogilvie G, Greene S, Nicholson V, Vonn M, Hogg R, Kaida A. The impact of criminalization of HIV non-disclosure on the healthcare engagement of women living with HIV in Canada: a comprehensive review of the evidence. *J Int AIDS Soc.* 2015;18:20572. PMC4689876.

INTRODUCTION: In 2012, the Supreme Court of Canada ruled that people living with HIV (PLWH) must disclose their HIV status to sexual partners prior to sexual activity that poses a "realistic possibility" of HIV transmission for consent to sex to be valid. The Supreme Court deemed that the duty to disclose could be averted if a person living with HIV both uses a condom and has a low plasma HIV-1 RNA viral load during vaginal sex. This is one of the strictest legal standards criminalizing HIV non-disclosure worldwide and has resulted in a high rate of prosecutions of PLWH in Canada. Public health advocates argue that the overly broad use of the criminal law against PLWH undermines efforts to engage individuals in healthcare and complicates gendered barriers to linkage and retention in care experienced by women living with HIV (WLWH). METHODS: We conducted a comprehensive review of peer-reviewed and non-peer-reviewed evidence published between 1998 and 2015 evaluating the impact of the criminalization of HIV non-disclosure on healthcare engagement of WLWH in Canada across key stages of the cascade of HIV care, specifically: HIV testing and diagnosis, linkage and retention in care, and adherence to antiretroviral therapy. Where available, evidence pertaining specifically to women was examined. Where these data were lacking, evidence relating to all PLWH in Canada or other international jurisdictions were included. RESULTS AND DISCUSSION: Evidence suggests that criminalization of HIV non-disclosure may create barriers to engagement and retention within the cascade of HIV care for PLWH in Canada, discouraging access to HIV testing for some people due to fears of legal implications following a positive diagnosis, and compromising linkage and retention in healthcare through concerns of exposure of confidential medical information. There is a lack of published empirical evidence focused specifically on women, which is a concern given the growing population of WLWH in Canada, among whom marginalized and vulnerable women are overrepresented. CONCLUSIONS: The threat of HIV non-disclosure prosecution combined with a heightened perception of surveillance may alter the environment within which women engage with healthcare services. Fully exploring the extent to which HIV criminalization represents a barrier to the healthcare engagement of WLWH is a public health priority.

Phillips JC, Domingue JL, Petty M, Coker MA, Howard T, Margolese S. HIV care nurses' knowledge of HIV criminalization: a feasibility study. *J Assoc Nurses AIDS Care.* 2016;27(6):755-767.

HIV-related criminal laws in some jurisdictions may hamper population health efforts to manage HIV and bring about an AIDS-free generation. HIV care nurses have an instrumental role to play in ensuring equitable care and health for all in a context of HIV. The purpose of our study was to determine HIV care nurses' knowledge of HIV-related criminal laws. Ecosocial theory and content expert opinion guided development of a questionnaire to assess nurses' knowledge of HIV-related criminal laws. A total of 174 HIV care nurses from Canada (n = 23) and the United States (n = 151) completed the questionnaire. Knowledge gaps were observed in several aspects of HIV-related criminal laws that can influence nursing clinical practices. Nurses should increase their knowledge of HIV-related criminal laws to ensure the success of population health initiatives and to reduce stigma and discrimination experienced by people living with HIV.

Sanders C. Discussing the limits of confidentiality: the impact of criminalizing HIV nondisclosure on public health nurses' counseling practices. *Public Health Ethics*. 2014;7(3):253-260.

In Canada, there have been a growing number of criminal HIV nondisclosure cases where public health records have been subpoenaed to aid in police investigations and/or to be presented in court as evidence against HIV-positive persons. This has led some to suggest that nurses provide explicit warnings about the limits of confidentiality in relation to crimes related to HIV nondisclosure, while others maintain that a robust account of the limits of confidentiality will undermine the nurse–client relationship and the public health goals of reducing HIV/sexually transmitted infection transmission. This article engages with this issue by exploring whether and how public health nurses endeavor to control information about the limits of confidentiality at the outset of HIV posttest counseling. The data indicate variation in practices, as nurses pragmatically balance ethical and professional concerns; although some nurses intentionally withhold information about the risk of subpoena, others report talking to clients about confidentiality in ways that focus on the risk of harm associated with criminalization. The discussion argues that practice variation also illuminates medico-legal relations between health care and the criminal justice system. Data are drawn from qualitative interviews with 30 nurses working at four public health units in Ontario.

Sanders C. Examining public health nurses' documentary practices: the impact of criminalizing HIV non-disclosure on inscription styles. *Critical Public Health*. 2015;25(4):398-409.

In Canada, there has been a rise in criminal HIV non-disclosure cases where public health records have been subpoenaed for use in police investigations and criminal court proceedings. In particular, public health nurses' written counseling notes, originally collected for the purposes of creating a record of treatment and a plan of care, have been used as evidence against their clients. This article engages sociologically with this issue by analyzing whether and how this criminal law development has affected public health nurses' reasoning and documentary practices in settings of HIV post-test counseling sessions. The paper argues that variations in nurses' inscription styles result in part from considerations about the criminal law, which indicates the influence of 'medico-legal' relations that connect health care and the criminal justice system. Implications for nursing practice and the broader goals of HIV prevention are discussed. Data are drawn from interviews with thirty nurses working at four public health units in Ontario.

Savage S, Braund R, Stewart T, Brennan DJ. How could I tell them that it's going to be okay? The impact of HIV nondisclosure criminalization on service provision to people living with HIV. *Journal of HIV/AIDS & Social Services*. 2017;16(3):287-300.

In 2012 the Supreme Court of Canada ruled that a person living with HIV must disclose their status before sex unless a condom is used, and they have a low or undetectable viral load, which is a measure of the amount of virus present in the bloodstream. This qualitative study examined the ruling's impact on HIV/AIDS support services provision. Semi-structured interviews were conducted with 15 psycho-social support providers working with people living with HIV/AIDS, and then recorded and transcribed verbatim. Using inductive thematic analysis, researchers extracted the themes of knowledge of the ruling and role of service providers. Findings highlight uncertainty over the ruling and its application and service providers' approaches to address the impacts of the ruling.

Speakman ER. Constructing an "HIV-Killer": HIV non-disclosure and the techniques of Vilification. *Deviant Behavior*. 2017;38(4):392-405.

Donileen Loseke has argued that social problems claims-making typically involves the construction of "people-categories" and more specifically the casting of victims and villains. While the processes by which victims are constructed have received attention in the literature, this is less so for villains. This article extends Loseke's work by using the case of HIV non-disclosers to explore precisely how people are typified as villains. I analyze discourse—or "talk"—surrounding the criminalization of HIV non-disclosure and non-disclosers with a view to identifying some of the strategies used to vilify non-disclosers. I refer to these strategies as the techniques of vilification.

Vannice S. *Barriers, access, resources and knowledge: an analysis of HIV testing vis women's voices in Ottawa* [master's thesis]. Ottawa, Canada: Department of Epidemiology and Community Medicine, Université d'Ottawa/University of Ottawa; 2016.

Women within African, Caribbean, and Black (ACB) communities are experiencing a higher burden of the HIV epidemic than other groups of women in Canada and a low uptake of HIV testing and counseling. As HIV testing is a well-recognized HIV prevention strategy, increasing HIV testing within those most affected by HIV in Canada is a high priority. Therefore, this study gathers and describes the perceptions, experiences, and knowledge of HIV and HIV testing and counseling among women within ACB communities in Ottawa. These perceptions and experiences provide rich context to current barriers to HIV testing and counseling access among these groups of women; context that is utilized to ground recommendations to improve experiences of HIV testing and counseling and to increase the uptake of HIV testing and counseling among ACB women. In essence, this study provides recommendations by ACB women for ACB Women.

Other Countries

Berry SD. *Community of blood: impacts and management of intersecting stigmas among Thai same-sex attracted men and transgender people with HIV* [dissertation]. Brisbane, Australia: School of Justice, Queensland University of Technology; 2017.

This study presents findings of research undertaken with 22 same-sex-attracted men and transgender people living with HIV (PLHIV) in community or self-help groups in Thailand. It examines experiences of stigma associated with same-sex attraction, non-binary gender identity and HIV. It investigates the ways that intersecting stigma associated with sex, gender and HIV affected the study participants' lives and influenced their decisions to join and remain in community groups of same-sex-attracted and transgender PLHIV. The project adopted grounded theory, a qualitative research method, to undertake fieldwork between 2012 and 2014. The research contributes to scholarship on HIV stigma and its management. The individuals living with HIV in this study felt generally powerless to change HIV stigma and its multiple impacts on their own. However, together they found they had more power and more capacity to change the Thai stigma associated with HIV.

Bolumar-Montero F, Fuster-Ruiz de Apodaca MJ, Weaitt M, Alventosa J, Del Amo J. Time trends, characteristics, and evidence of scientific advances within the legal complaints for alleged sexual HIV transmission in Spain: 1996-2012. *AIDS Care*. 2015;27(4):529-535.

This article quantifies and characterizes existing legal complaints for the sexual transmission of HIV in Spain, describes temporal trends and whether advance of scientific knowledge is reflected in charging decisions, judicial reasoning, and sentences. Sentences and writs dictated by Spanish penal and civil jurisdictions between 1981 and 2012 were obtained through legal databases systematic search. Sixteen sentences and 9 writs belonging to 19 cases were included; 17 judged by penal and two by civil jurisdictions. The first sentence was pronounced in 1996, 3 between 1999 and 2000, 4 between 2001 and 2005, and 18 between 2006 and 2012. In 10 (53%) cases there was effective HIV transmission, there was not in 6 (32%) and in 3 (15%) directionality could not be determined. Of the defendants, 15 (79%) were heterosexual males, 1 of which was an injecting drug user (IDU), 3 were men who have sex with men (MSM), and 1 was a heterosexual woman. In the 10 cases of HIV transmission, the mechanism was heterosexual sex and index cases were males in nine occasions. Disclosure of HIV status, use of condoms and its frequency, and its possible breaks were mentioned in only some sentences/judicial decisions and fewer mentioned the use of antiretroviral treatment. Very few cases referred to plasma viral load (VL), and there are incorrect statements regarding HIV transmissibility. Only one 2012 sentence mentioned VL levels, adherence to ART, CD4 lymphocyte levels, concomitant sexually transmitted infections, and references to pertinent literature. The number of judicial decisions in Spain is increasing and the profile of the plaintiffs, largely heterosexual women, does not reflect the groups most affected by the HIV epidemic, largely IDU and MSM. Most judgments and writs do not reflect HIV scientific and technical advances. It is of utmost importance that these complex processes incorporate the most up-to-date knowledge on the subject.

Dodds C, Bourne A, Weait M. Responses to criminal prosecutions for HIV transmission among gay men with HIV in England and Wales. *Reprod Health Matters*. 2009;17(34):135-145.

In England and Wales, criminal prosecutions for recklessly causing serious bodily harm by transmitting HIV have occurred since 2003. Understanding how people respond to the application of criminal law, will help to

determine the likely impact of prosecution. As part of a wider qualitative study on unprotected anal intercourse amongst homosexually active men with diagnosed HIV in England and Wales, 42 respondents were asked about their awareness of criminal prosecutions for the sexual transmission of HIV, and how (if at all) they had adapted their sexual behaviour as a result. Findings demonstrate considerable confusion regarding the law and suggest that misunderstandings could lead people with HIV to wrongly believe that how they act, and what they do or do not say, is legitimated by law. Although criminalisation prompted some respondents to take steps to reduce sexual transmission of HIV, others moderated their behaviour in ways likely to have adverse effects, or reported no change. The aim of the criminal justice system is to carry out justice, not to improve public health. The question addressed in this paper is whether desirable public health outcomes may be outweighed by undesirable ones when the criminal law is applied to a population-level epidemic.

Dodds C, Hammond G, Weatherburn P, Hickson F, Keogh P, Reid D, Henderson L, Jessup K. Homosexually active men's views on criminal prosecutions for HIV transmission are related to HIV prevention need. *AIDS Care*. 2008;20(5):509-514.

There has been much debate and discussion about the potential public health impact of the emergence of criminal prosecutions for the sexual transmission of HIV in the United Kingdom. This paper offers a unique opportunity to examine data that connects views on criminal prosecutions with evidence of HIV prevention need among an opportunistic sample of men in the UK who are homosexually active. Quantitative and qualitative data on criminal prosecutions were collected as a part of the Gay Men's Sex Survey 2006, and this paper represents an initial analysis of those responses. The data demonstrate how dominant views on criminal prosecutions come into direct conflict with health promotion aims, thereby exacerbating pre-existing HIV prevention need in a population at increased risk of participating in HIV transmission. This conflict is most clearly apparent in the close relationship between men's support of criminal prosecutions, and their expectation that a partner with diagnosed HIV will disclose his status before engaging in sex. Changing such unrealistic and universalised expectations has long been an aim of HIV prevention planning that targets Gay and Bisexual men, yet it would appear that the popularity of criminal prosecutions helps to resist attitudinal change, thereby exacerbating HIV prevention need.

Dodds C, Keogh P. Criminal prosecutions for HIV transmission: people living with HIV respond. *Int J STD AIDS*. 2006;17(5):315-318.

This paper presents an analysis of responses to the first criminal convictions for HIV transmission in England and Wales within a sample of people living with HIV. These findings represent an important contribution to the development of well-informed prosecution policy. The responses were collected during 20 focused group discussions with a community and web-recruited sample of heterosexual African men and women, and gay and bisexual men (n = 125) living with diagnosed HIV in London, Manchester and Brighton. The vast majority (90%) of comments made were critical of the implementation and impact of criminalization. In particular, respondents expressed concern about the way in which criminal convictions conflict with messages about shared responsibility for 'safer sex', and the extent to which such cases will exacerbate existing stigma and discrimination related to HIV. Most felt that the successes achieved by human rights approaches to HIV prevention, treatment, and care were placed under threat by the growing culture of blame encouraged by criminal prosecutions.

Dodds C, Keogh P, Chime O, Haruperi T, Nabulya B, Ssanyu Sseruma W, Weatherburn P. *Outsider status: stigma and discrimination experienced by gay men and African people with HIV*. Sigma Research; 2004. Available at: <http://sigmaresearch.org.uk/downloads/report04f.pdf>.

This report will describe the ways in which systemic and widespread homophobia, racism and xenophobia (coalesced with a wide range of other detrimental attitudes such as misogyny and the tendency to discriminate on the basis of age or disability), constitute the stigmatising responses associated with HIV. Without acknowledging and addressing the social inequalities that underlie and are essentially the rationale for HIV-related stigma and discrimination, there will be little possibility of a successful response. In doing so, we aim to make a significant contribution both to the development of the action plan and the activities of the Department of Health and of HIV organisations. By presenting the experiences and opinions of people living with HIV in the light of the social and institutional inequalities that pervade those experiences, we aim to produce a resource which will be relevant to the development of imminent policy. We also expect that this work

serves as a longer-term resource for those investigating the detailed and complex realities of stigma and discrimination as they affect those living with diagnosed HIV.

Dodds C, Weait M, Bourne A, Egede S. Keeping confidence: HIV and the criminal law from HIV service providers' perspectives. *Crit Public Health*. 2015;25(4):410-426. PMC4647852.

We present qualitative research findings about how perceptions of criminal prosecutions for the transmission of HIV interact with the provision of high-quality HIV health and social care in England and Wales. Seven focus groups were undertaken with a total of 75 diverse professionals working in clinical and community-based services for people with HIV. Participants' understanding of the law in this area was varied, with many knowing the basic requirements for a prosecution, yet lacking confidence in the best way to communicate key details with those using their service. Prosecutions for HIV transmission have influenced, and in some instances, disrupted the provision of HIV services, creating ambivalence and concern among many providers about their new role as providers of legal information. The way that participants approached the topic with service users was influenced by their personal views on individual and shared responsibility for health, their concerns about professional liability and their degree of trust in non-coercive health promotion approaches to managing public health. These findings reveal an underlying ambivalence among many providers about how they regard the interface between criminal law, coercion and public health. It is also apparent that in most HIV service environments, meaningful exploration of practical ethical issues is relatively rare. The data presented here will additionally be of use to managers and providers of HIV services in order that they can provide consistent and confident support and advice to people with HIV.

Dodds C, Weait M, Bourne A, Egede S, Jessup K, Weatherburn P. Keeping Confidence: HIV and the criminal law from service provider perspectives Sigma Research; 2013. Available at: <http://sigmaresearch.org.uk/projects/item/project55>.

Keeping Confidence is a qualitative research study that explores the perceptions of criminal prosecutions for HIV transmission among those providing support, health and social care services for people with HIV. The Keeping Confidence project set out to explore the specific ways that criminal prosecutions for HIV transmission in England and Wales are handled by those who deliver health and social care services for people with HIV. Specifically, we aimed to:

- Better understand how and when the topic of criminal prosecutions arose in the service setting, and the extent to which service providers felt adequately prepared and supported.
- Assess the perceived impact of criminalisation on provider capacity to deliver the best quality service.
- Establish the extent to which service providers felt that criminalisation had affected clients' openness and trust within the service setting.

Dodds C, Weatherburne P, Bourne A, Hammond G, Weait M, Hickson F, Reid D, Jessup K. Sexually charged: the views of gay and bisexual men on criminal prosecution for sexual HIV transmission. Sigma Research; 2009. Available at: <http://sigmaresearch.org.uk/files/report2009a.pdf>.

We used the Gay Men's Sex Survey 2006 to elicit the views of a large number of gay men and bisexual men on criminal prosecutions for the sexual transmission of HIV infection in order to better understand how this might impact on their sexual risk behaviour. The survey is an annual community-based collaborative action research intervention that was also used to give men some facts about HIV and prosecution.

We wanted to explore men's perspectives on criminal prosecutions to better understand how prosecutions shape the landscape within which HIV prevention activities occur. Given the paucity of published research on perceptions of criminal prosecutions for HIV transmission in the UK or elsewhere, we hope this work makes a significant contribution to understanding how prosecutions are interpreted within populations at risk of HIV transmission. During the period of fieldwork, there was a significant amount of national press coverage of a London woman prosecuted for the reckless transmission of HIV. That same summer brought news of the first conviction where the defendant and complainant were both gay men. Thus, the issue was very current in the mainstream press and the gay press at that time.

Eba PM. The HIV and AIDS tribunal of Kenya: An effective mechanism for the enforcement of HIV-related human rights? *Health Hum Rights*. 2016;18(1):169-180. PMC5070689.

Established under Section 25 of the HIV Prevention and Control Act of 2006, the HIV and AIDS Tribunal of Kenya is the only HIV-specific statutory body in the world with the mandate to adjudicate cases relating to violations of HIV-related human rights. Yet, very limited research has been done on this tribunal. Based on findings from a desk research and semi-structured interviews of key informants conducted in Kenya, this article analyzes the composition, mandate, procedures, practice, and cases of the tribunal with the aim to appreciate its contribution to the advancement of human rights in the context of HIV. It concludes that, after a sluggish start, the HIV and AIDS Tribunal of Kenya is now keeping its promise to advance the human rights of people living with and affected by HIV in Kenya, notably through addressing barriers to access to justice, swift ruling, and purposeful application of the law. The article, however, highlights various challenges still affecting the tribunal and its effectiveness, and cautions about the replication of this model in other jurisdictions without a full appraisal.

Gianacas C, Down I, Ellard J, Kidd P, Brown G, Triffitt K, Persson A, Prestage G. *Experiences of HIV: The Seroconversion Study: final report 2007-2015*. The Kirby Institute, UNSW Australia; 2015. 0733436439. Available at: http://www.latrobe.edu.au/data/assets/pdf_file/0009/713655/HIV-Seroconversion-Study-Report-2007-2015.pdf.

The Seroconversion Study has existed in several forms since 1992. This most recent version completed data collection in 2015. Seroconversion studies have played an important role in the Australian HIV response and are a useful research tool in understanding the current circumstances of HIV infection. This version of the Seroconversion Study occurred at a time of rapid and fundamental changes in our understandings, and implementation, of HIV treatment and prevention. As with previous versions of the study, it mainly targeted gay and bisexual men (GBM). However, some limited data were collected from women and heterosexual men in this current version. As the Australian HIV sector faces the challenge of achieving the virtual elimination of HIV transmission, the insights those who have been recently diagnosed with HIV provide through this report will help to address the challenges posed by the changes in biomedical prevention, treatment, and testing. Until recently, the annual number of new HIV diagnoses has not decreased (both in terms of raw number per year and as a percentage of population). Testing rates in key populations had also changed little. Uptake of treatment, and viral suppression, among those living with HIV had, however, steadily increased over time. However, recent advances have begun to see some early signs of shifts in these long-term trends. Innovations to how HIV testing is delivered have provided a greater range of options for individuals to seek testing than was previously the case. Both Treatment as Prevention (TasP) and Pre-Exposure Prophylaxis (PrEP) offer effective methods of HIV-prevention that can complement condom use. The benefits of early initiation of treatment for the health of those with HIV have become increasingly clear, and are now firmly established. Combined, these changes offer a real possibility of achieving the virtual elimination of HIV transmission in Australia. Apart from structural limitations, the main challenge to achieving this goal is how at-risk individuals respond to these changes: Can they, and will they, make the necessary adaptations to these changes that will make them both effective and successful? In this context, the Seroconversion Study has provided both qualitative and quantitative data from those individuals who have been diagnosed during this highly dynamic period of the epidemic, and as these innovations to and new knowledge about treatment and prevention have been introduced.

Grace D. Legislative epidemics: the role of model law in the transnational trend to criminalise HIV transmission. *Med Humanit*. 2013;39(2):77-84.

HIV-related state laws are being created transnationally through the use of omnibus model laws. In 2004, the US Agency for International Development (USAID) funded the creation of one such guidance text known as the USAID/Action for West Africa Region Model Law, or N'Djamena Model Law, which led to the rapid spread of HIV/AIDS laws, including the criminalisation of HIV transmission, across much of West and Central Africa (2005-2010). In this article, I explicate how an epidemic of highly problematic legislation spread across the region as a result of a text-mediated work process enabled through model laws. I theorise the textual genre of model laws arguing that these texts are best understood as 'preoperative documents' which, when activated, can lead to swift legislative reform in and beyond the field of HIV/AIDS governance. The legislative process being investigated was made visible through participant observation, archival research,

textual analysis and informant interviews with national and international stakeholders (n=32). This involved ethnographic research in Canada, the USA, Switzerland, Austria, South Africa and Senegal (2010-2011). The untold policy processes and narratives explored in this article make evident how the work of contesting problematic HIV/AIDS model laws and newly drafted state laws involves both creating new texts and contesting the legitimacy and efficacy of others.

Grace D. Criminalizing HIV transmission using model law: troubling best practice standardizations in the global HIV/AIDS response. *Critical Public Health*. 2015;25(4):441-454.

A growing body of social science research has focused on the negative public health consequences of criminalizing the sexual transmission of HIV. I examine the criminalization of contagion in West and Central Africa and address a significant research gap: How do legislative environments that enable harmful laws to be applied become created in the first place? With stated aims of promoting human rights and public health objectives, HIV/AIDS-related laws have been created transnationally through the use of an omnibus model law. A group of legislative actors have problematized this United States Agency for International Development (USAID) funded model law, known as the USAID/Action for West African Region model law, or N'Djamena model law. This 'harmonizing' text led to the rapid spread of HIV/AIDS laws, including the criminalization of HIV transmission, across at least 15 countries in West and Central Africa between 2005 and 2010. The HIV model law was packaged and 'sold' to developing countries through the strategic use of best practice discourse. Best practice replications are enabled through a set of social and technological relations of use including the availability of mobile, standardizing texts. Although best practice standardization has been a key feature of global health institutions work activities in the HIV response over the past two decades, recent replications related to the criminalization of HIV transmission illustrate the potential public health dangers of 'don't reinvent the wheel' thinking. I offer a normative critique of the transnational, text-mediated process that has produced highly problematic laws.

Grierson J, Pitts M, Koelmeyer R. *HIV Futures 7: the health and wellbeing of HIV positive people in Australia*. Australian Research Centre in Sex, Health and Society, La Trobe University; 2013. Available at: http://www.latrobe.edu.au/data/assets/pdf_file/0007/546037/HIV-Futures-Seven-Report.pdf.

HIV Futures is an anonymous survey of PLHIV. It asks people about a range of issues including their health, treatments, work and financial situation. HIV Futures surveys have been conducted every two to three years since 1997, attracting responses from around 1000 PLHIV each time. The HIV Futures survey has been developed in consultation with a variety of community groups and it is officially supported by the National Association of People Living with HIV/AIDS (NAPWA), the Australian Federation of AIDS Organisations (AFAO) and the Australasian Society of HIV Medicine (ASHM). HIV Futures provides information to PLHIV, community organisations, service providers, doctors and government about the actual experience of living with HIV and the current needs of PLHIV.

James R. Who gets prosecuted? A review of HIV transmission and exposure cases in Austria, the United Kingdom, Sweden and Switzerland. Poster presented at XVIII International AIDS Conference (AIDS 2010); 2010; Vienna, Austria.

The author examines which people and which communicable diseases came to the attention of the criminal justice system in four European countries, and concludes: "Men were more likely than women to be prosecuted for HIV exposure or transmission under criminal laws in Sweden, Switzerland and the UK. The majority of cases in Austria involved the prosecution of female sex workers. Migrants from southern and west African countries were the first people prosecuted in Sweden and England but home nationals have now become the largest group prosecuted in both countries. Even in countries without HIV specific criminal laws, people with HIV have been prosecuted more often than people with more common contagious diseases."

Jeffreys E, Matthews K, Thomas A. HIV criminalisation and sex work in Australia. *Reprod Health Matters*. 2010;18(35):129-136.

In 2008, Scarlet Alliance, the Australian Sex Workers Association, carried out a needs assessment among sex workers living with HIV in Australia. The research showed that HIV positive sex workers experience discrimination from within the community, are criminalised for sex work and subject to disclosure laws in some states and territories, and face stigma perpetrated by the media. Supported by legislation, they have an almost

insurmountable lack of access to policy development due to disclosure and confidentiality issues, and have expressed ongoing frustration at the lack of leadership on the intersecting issues of HIV and sex work. A high profile prosecution of a sex worker living with HIV coincided with the duration of the needs assessment project. The research gave a voice to sex workers living with HIV and highlighted the levels of institutionalised marginalisation and stigmatisation they experience. Criminalisation of sex work, of people living with HIV, and of sex workers living with HIV is at the core of this discrimination and must be challenged. Scarlet Alliance advocates for the decriminalisation of sex work across all jurisdictions in Australia. This will deliver rights to sex workers living with HIV and create a more equitable and productive environment for HIV prevention and public health generally.

Jelliman P, Porcellato L. HIV is now a manageable long-term condition, but what makes it unique? A qualitative study exploring views about distinguishing features from multi-professional HIV specialists in North West England. *J Assoc Nurses AIDS Care*. 2017;28(1):165-178.

HIV is evolving from a life-threatening infection to a long-term, manageable condition because of medical advances, radical changes in health and social care policy, and the impact of an aging population. However, HIV remains complex, presenting unique characteristics distinguishing it from other long-term conditions (LTCs). Our aim in this qualitative descriptive study was to identify and explore these features in the context of LTCs. A focus group (FG) method was used to gather the views and experiences of multi-professional HIV specialists who worked in North West England. Twenty-four staff participated in FGs (n = 3), which were audio recorded, manually transcribed, and thematically analyzed. We found four main themes: (a) stigma, (b) challenges faced by HIV specialists, (c) lack HIV-related knowledge, and (d) unique features, termed "stand alone." We concluded that these distinguishing features hindered full recognition and acceptance of HIV as an LTC.

Note: In the context of criminal laws, study participants express that "*actual and potential accusations and prosecutions have been incredibly complex and traumatic, impacting the health and well-being of both people living with HIV and professionals.*" They also feel that the law is harmful to public health.

Kavanagh B. How do men who have sex with men currently understand, evaluate and respond to HIV risk? A mixed methods analysis of an internet survey in a post-antiretroviral society [dissertation]. Milton Keynes, England: School of Health and Social Care, The Open University; 2017.

This thesis sets out to examine how men who have sex with men (MSM) currently understand, evaluate and respond to HIV risk. The aims of the study were to explore key areas of HIV risk understanding, including how HIV risk was understood in a post-antiretroviral society and how masculinities affect this risk understanding. In addition, key aspects of the negotiation of sex used by those who were single and in (open) relationships were considered. An examination of a variety of mass media HIV prevention interventions was carried out to explore what viewing them tells us about risk perception and response. Of key interest to this research was how these understandings of HIV risk were evolving within the context of the shifting definitions of love, with the introduction of formalised relationship structures, and sex, caused by the impact of antiretrovirals in the MSM communities. This study unified the results from quantitative and qualitative data that emerged from an online mixed methods survey to unravel the experiences of a convenience sample of 557 UK-based MSM. This survey incorporated a mixture of both open and closed questions, vignette questions and made the use of visuals to allow nuanced responses to emerge. The findings reveal how these shifting definitions of sex and love are affecting how men understand HIV risk, the consequences for the negotiation of sex, and indicate various improvements that may need to be made to address these issues.

Kpanake L, Patassi A, Mullet E. Criminal prosecution of a male partner for sexual transmission of infectious diseases: the views of educated people living in Togo. *Sex Transm Infect*. 2013;89(4):290-294.

OBJECTIVE: To examine the views of educated people in Togo on the acceptability of criminal prosecution of a male partner for sexual transmission of infectious diseases (STIDs) to his female partner. **METHODS:** 199 adults living in Kara, Togo judged acceptability of criminal prosecution for STID in 45 scenarios composed of combinations of five factors: (a) severity of disease; (b) awareness and communication of one's serological status; (c) partners' marital status; (d) number of sexual partners the female partner has and (e) male partner's subsequent attitude (supportive or not). **RESULTS:** Acceptability was lower (a) when the

male partner decided to take care of his female partner he had infected than when he decided to leave, (b) when both partners were informed but decided not to take precautions than when none of them was informed or when only the male partner was informed and (c) when the female partner has had several male sexual partners than when she has had only one. Two qualitatively different views were identified. For 66% of participants, when the male partner accepts to take care of his partner, he should not be sued, except when he did not disclose his serological status. For 34%, when both partners were informed, the male partner should not be sued, irrespective of other circumstances. **CONCLUSIONS:** Regarding criminal prosecution for STID, most people in the sample endorsed the position of the Joint United Nations Programme on HIV/AIDS that urges governments not to apply criminal law to cases where sexual partners disclosed their status or were not informed of it.

Mazanderani F. An ethics of intimacy: Online dating, viral-sociality and living with HIV. *BioSocieties*. 2012;7(4):393-409.

There has been considerable academic interest in how people living with HIV use the internet for online dating and sex seeking. Most of this work has focused on the relationship between internet use and the risk of viral transmission. Drawing on an analysis of HIV dating websites and interviews with women living with HIV, this article moves beyond this and connects the use of dating websites with the changing dynamics of what constitutes a 'normal' life with HIV in the 'post-AIDS' era. The use of these websites is situated within a broader ethics of intimacy in which people living with HIV are told they are able to develop 'normal' sexual/romantic relationships, yet their right to do so is contingent on them pro-actively protecting others from infection. The disclosure of an HIV-positive status and the selection of HIV-positive partners are explored as key mechanisms for preventing the spread of the virus while enabling people 'living with HIV' to form intimate relations, 'sharing the virus' in other ways – practices conceptualised here as 'viral-sociality'. Throughout the discussion attention is drawn to how sexual relations, clinical encounters and HIV-related criminal prosecutions intersect in this field, such that the most private aspects of 'living with' the virus can at the same time be the most public.

McKay FH, Thomas SL, Holland K, Blood RW, Kneebone S. "AIDS assassins": Australian media's portrayal of HIV-positive refugees who deliberately infect others. *Journal of Immigrant & Refugee Studies*. 2011;9(1):20-37.

The media representations of refugees who are HIV-positive often revolve around criminal transmission cases. This study examines the approach the Australian mass media have taken toward the case of two men from refugee backgrounds and how this stigmatizing language is unhelpful in discussions of HIV. An extensive search of the Factiva database was undertaken for all newspaper articles in the major dailies that mentioned "HIV," "AIDS," and "refugee" between 2002 and 2008. Analysis was guided by several approaches to media analysis in an attempt to understand the representations of HIV-positive refugees. When analyzing the media articles of criminal cases relating to HIV we found that refugees who are HIV-positive were portrayed in a negative fashion, with the concept of "otherness" prominent throughout most newspaper media reports. Considering this is the main source of information for most people concerning HIV, this representation carries the potential to lead to further stigma and discrimination to both people living with HIV and refugees.

McKnight U. *The challenge of HIV within an HIV specialist antenatal clinic in London: providing and receiving care within an HIV diaspora* [dissertation]. London, England: Department of Sociology, Goldsmiths, University of London; 2016.

The ability to prevent vertical transmission of HIV (where HIV is transmitted from mother to (unborn) baby in utero, at birth or through breastfeeding) is generally considered to be the most successful achievement of HIV biomedicine and care. Indeed if appropriate care and biomedical technologies are available, transmission rates can be reduced to less than 1%. However, there has been very little qualitative research investigating the contingencies and requirements of specialist HIV antenatal care in resource rich settings. Adopting theoretical insights from Science and Technology studies (STS) and anthropology within a broader sociological frame, this research explores the challenges of HIV and the successful prevention of vertical transmission in a specialist antenatal clinic which arguably has access to the most advanced care and biomedical technologies. In doing so, the thesis investigates the way in which the identity of a particular illness — specifically HIV — is maintained in social, clinical and technical domains. Moreover, it explores the requirements of successful specialist HIV antenatal care from the perspective of both practitioner and patient,

and it considers how the interests of patients, (unborn) babies and health professionals are reconciled, if at all, within the clinic. The description of specialist HIV and antenatal care provided in this study draws on empirical research conducted in an HIV specialist antenatal clinic housed within an acute National Health Services hospital in London, UK. The research makes a practical contribution to knowledge about specialist HIV antenatal care through theoretically informed reflections on some of the requirements and contingencies of providing and participating in specialist antenatal HIV care in London. Moreover, the research offers an analysis of the clinic that interrogates the relations between social dynamics, (bio)medical practice and technological interventions. In this way, the research also contributes to the social scientific HIV field by explicating how social understandings of HIV and pregnancy are intimately entangled with (bio)medical practice, technological intervention, and what I have called an "HIV diaspora".

Newman C, Persson A. Fear, complacency and the spectacle of risk: the making of HIV as a public concern in Australia. *Health (London)*. 2009;13(1):7-23.

This article explores how HIV is constituted as a matter of public concern in Australia, where - unlike much of the rest of the world - there is a continuing low incidence of heterosexual transmission. In this context, it is timely to explore how the media contributes to the ongoing mobilization of public interest in HIV, and how heterosexual audiences are brought into focus as the imagined 'publics' of mainstream debates on HIV. This article identifies three approaches to generating public concern in HIV news stories published in The Sydney Morning Herald between 2000 and 2005 as well as in academic media analysis and HIV education and advocacy. Reflections on fear revisit the early years of the epidemic, distinguishing a generation of Australian audiences shaped by the Grim Reaper campaign. Encounters with complacency focus on an apparently widespread lack of concern about HIV in the present. And projections in risk forecast a multiplication of HIV risk environments, despite confusion about who should be personally concerned about those risks. Together they construct Australian publics as passive, vulnerable, unaware and potentially uncaring, yet do little to engage the mainstream as more than spectators of public concern about HIV.

Persson A. "I don't blame that guy that gave it to me": contested discourses of victimisation and culpability in the narratives of heterosexual women infected with HIV. *AIDS Care*. 2014;26(2):233-239.

In Australia, most women with HIV were infected through heterosexual sex, echoing global patterns. In media coverage, these women are typically portrayed as having been deceived by men they trusted, or as victims in criminal cases against HIV-positive men from high-prevalence countries. Heterosexuals are clearly overrepresented in such cases, a pattern consistent across high-income countries. It has been suggested that the victim/perpetrator distinction that defines criminal cases and media stories has some resonance among heterosexuals because of gender power dynamics. But less attention has been paid to the ways women themselves make sense of heterosexual transmission of HIV. Drawing on qualitative interviews from two larger studies, this article shows how the victim-culprit binary is challenged by women's own accounts of acquiring HIV. None presented themselves as "victims" in any straightforward sense, or placed the blame squarely on the men, including men who had not disclosed HIV. Instead, their narratives revealed themes of "mutual vulnerability" and far more ambivalent allocations of responsibility. I conclude that the tendency to position women who become infected with HIV in a victim discourse obscures the complex realities of sexual practice and gender that play a part in the epidemic in any cultural context and that have implications for HIV prevention.

Persson A, Newman C. Making monsters: heterosexuality, crime and race in recent Western media coverage of HIV. *Sociology of Health & Illness*. 2008;30(4):632-646.

In the early HIV epidemic, Western media coverage encouraged the idea that infection was linked to 'other' identities located outside the 'mainstream'; outside 'proper' heterosexuality. Today, however, HIV has become repositioned as a global heterosexual epidemic. Analyses show that since the 1990s Western media have shifted away from blame and hysteria to an increasingly routinised reporting of HIV as a health story and social justice issue. But recent years have seen the emergence of a new media story in many Western countries; the criminal prosecution for HIV-related offences, and with it a reframing of old discourses of 'innocence' and 'guilt', but now with heterosexuals in focus. We examine this story in recent domestic media coverage in Australia, a country where heterosexual HIV transmission is rare by global comparison. Echoing similar stories in other Western media, in Australian coverage the idea of criminal intent converges with the

symbolic weight of black sexuality and African origins to produce a 'monstrous' masculinity, which at the local level taps into contemporary racial tensions and, in so doing, conjures an imagined Anglo-heterosexuality at once vulnerable to and safe from HIV in a globalised epidemic and world.

Phillips MD, Schembri G. Narratives of HIV: measuring understanding of HIV and the law in HIV-positive patients. *J Fam Plann Reprod Health Care.* 2016;42(1):30-35.

OBJECTIVE: This study aimed to identify the understanding of people living with HIV and AIDS (PLWHA) regarding the application of the law around transmission of HIV in England and Wales. **DESIGN:** A questionnaire was designed to prompt participants attending a large HIV department to discuss their understanding of the law with reference to HIV transmission. The design focused on qualitative analysis as there were insufficient data available to inform a metric reflecting quantitative data on PLWHA's understanding of the legal implications of transmission. **METHODS:** The data were collected from PLWHA attending their HIV outpatient appointment to ensure relevance of population to the analysis. The answers were analysed using grounded theory and thematic analysis to identify key themes and theories for further testing. **RESULTS:** Analysis demonstrated that understanding of legal obligations and outcomes of prosecutions was poor and patchy, with behavioural restrictions often overstated. There was a strong theme of ownership of responsibility amongst PLWHA, and of reference to principles of morality beyond legal restrictions. **CONCLUSIONS:** PLWHA remain at risk of prosecution through poor understanding of the law. Clinical services and advocacy agencies should strive to increase understanding in order to enable PLWHA to comprehend the law and negotiate it successfully. This information should be shared as a process, not an isolated event.

Power L, Hows J, Jakobsen SF, Opt TbHIViE. Key findings on legal and regulatory barriers to HIV testing and access to care across Europe. *HIV Med.* 2018;19 Suppl 1:58-62.

OBJECTIVE: The aim of this work within OptTEST by HiE has been to demonstrate the role of legal and regulatory barriers in hindering access to HIV testing, treatment and care across Europe and to produce tools to help dismantle them. **METHODS:** An online survey to assess country-specific data on legal and regulatory barriers distributed widely across the WHO Europe region. Literature reviews conducted in January-October 2015 in English, in November 2015 in Russian, and updated in April 2017. Semi-structured interviews were conducted with 25 key actors within the HIV field to feed into case studies and tip sheets on how to dismantle legal and regulatory barriers. **RESULTS:** More than 160 individuals and organisations from 49 countries across the WHO European region provided responses which were analysed and cross checked with other data sources and a searchable database produced (legalbarriers.peoplewithhiveurope.org). The conducted literature reviews yielded 88 papers and reports which identify legal and regulatory barriers to key populations' access to HIV testing and care. Based on the interviews with key actors, ranging from PLHIV activists to government officials, on lessons-learned, a series of tip sheets and ten case studies were written-up intended to inform and inspire the HIV community to address and overcome existing barriers (opttest.eu/Tools). **CONCLUSION:** While some of the barriers identified may require major changes to wider health systems, or long term legal reform, many are open to a simple change in regulations or custom and practice. We have the tools. Why can't we finish the job?

Reddock JR. Assessing the right to health in the sixth millennium development goal in the Eastern Caribbean. *World Medical & Health Policy.* 2016;8(3):305-328.

Millennium Development Goal 6 aimed to combat HIV/AIDS, and target 6B specifically focused on universal access to antiretrovirals. Global Millennium Development Goal (MDG) reporting based on national averages missed smaller populations and did not include a human rights viewpoint. Six countries in the Eastern Caribbean that endorsed the 2000 Millennium Declaration that were not included in global UNAIDS estimates were selected for this study. In this paper, physicians in the Eastern Caribbean provide a qualitative assessment of the sixth MDG from a right to health perspective that includes the dimensions of availability, accessibility, acceptability, and quality.

Stackpool-Moore L. 'The intention may not be cruel... but the impact may be': understanding legislators' motives and wider public attitudes to a draft HIV Bill in Malawi. *Sex Transm Infect.* 2013;89(4):285-289.

OBJECTIVES: The law in relation to HIV has prominence in the formation and regulation of moral norms-in regard to human rights, and in regard to criminalisation, the policing of sexuality and intimate behaviours, and the production of stigma. The research focuses on the potential and impotence of the law to govern for, and enable, the human right to health in the context of HIV in Malawi. **METHODS:** This one-country qualitative case study (Malawi) action research involved data collection during a 6-month period (October 2010-March 2011). Datasets include interviews with law commissioners (n=10), opinion leaders (n=22), life story participants who were people living with and closely affected by HIV (n=20), reflections of the action research team (n=6), and a review of the proposed HIV and AIDS (Prevention and Management) Bill, legal and policy documents. **RESULTS:** The analysis of the perspectives of the law commissioners, who formed the Special Law Commission and drafted the Bill, revealed that stigma was consciously invoked to delineate social norms and guide governance of notions of personal responsibility. The analysis of the perspectives of the life story participants, whose lives would be most directly impacted if these provisions came into force, reveals the extent to which the stigma associating criminality and HIV is falling on fertile ground through its engagement and generation of internalised stigma; unearthing an uneasy link between stigma and the law in response to HIV in Malawi. **DISCUSSION:** The results indicated that the proposed HIV Bill in Malawi manifests a tension between intention and impact. By incorporating criminal sanctions as part of the proposed HIV Bill, the lawmakers actively seek to use stigma to shape social attitudes and attempt to guide normative behaviour.

Suzan-Monti M, Celse M, Vilotitch A, Demoulin B, Dray-Spira R, Yeni P, Lert F, Spire B, group AVs. Assessment of Awareness of, Concerns and Attitudes Towards HIV-Related Court-Case Sentences in France in a Representative Sample of People Living with HIV (ANRS VESPA2 Survey). *AIDS Behav.* 2018.

Some of the 12 criminal trials and sentences in France for HIV transmission in 1998-2011 attracted substantial public attention, with a possible negative impact on people living with HIV (PLWH) through reinforced stigma and discrimination. This analysis aimed to characterize PLWH enrolled in the representative ANRS-VESPA2 survey, aware of and concerned about convictions for HIV transmission. Being a migrant from Sub-Saharan Africa, having difficult socio-economic conditions, having unprotected sex with one's main partner and concealing one's HIV status were all factors statistically associated with concern about the sentences. Participants tempted to press charges against someone for infecting them were more likely to be younger, women, not living in a couple, unemployed, and to report a major depressive disorder. Concern about HIV-related criminal proceedings among the most vulnerable PLWH do not reflect the actual risk of prosecution they are exposed to.

UK Coalition of People Living with HIV & AIDS. *Criminalisation of HIV transmission: Results of online and postal questionnaire survey.* UK Coalition of People Living with HIV & AIDS; 2005.

The questionnaire was introduced in the May edition of Positive Nation, with top of page advertising on both the PN and UKC websites. Responses were elicited either by post or on line via the UKC website (those received by post were transcribed to the website by PN staff). 233 responses were recorded and with publication of some interim results in the August edition of Positive Nation, the questionnaire was closed in case the editorial coverage biased further responses.

The questionnaire did not ask respondents to define themselves by age, ethnicity, sex, marital status or lifestyle – as such the answers may represent a snapshot of how people with HIV see their position on the questions asked, but the number of respondents is not sufficiently high to form a representative sample. The survey targeted people with HIV, but the anonymous nature of responses makes it possible, particularly on line, that the same person could respond more than once.

Weatherburn P, Hickson F, Reid D, Jessup K, Hammond G. *Multiple chances: findings from the United Kingdom's gay men's sex survey 2006.* Sigma Research; 2008. Available at: <http://sigmaresearch.org.uk/files/report2008c.pdf>.

This research report outlines the main findings of Vital Statistics 2006 – which was the tenth annual Gay Men's Sex Survey (GMSS). The survey was carried out from July to October 2006 by Sigma Research in

partnership with 107 organisations across the United Kingdom (see Acknowledgements for a list of collaborators). The information in this report is about HIV infection, sex between men and HIV prevention needs. The intended audience includes people involved in planning and delivering programmes to address the HIV prevention needs of homosexually active men. It complements our annual reports from GMSS in 1997 to 2005 (Hickson et al. 1998; Hickson et al. 1999; Weatherburn et al. 2000; Hickson et al. 2001; Reid et al. 2002; Hickson et al. 2003a; Reid et al. 2004; Weatherburn et al. 2005, Hickson et al. 2007).

GMSS recruits using two methods: online and through the distribution of seal-and-return booklets by agencies working with gay and bisexual clients. Men completing GMSS 2006 were told *All of the following statements are TRUE:*

- Laws that can be used against the sexual behaviour of people with HIV are different in different countries.
- Some people with HIV have been imprisoned in the UK for passing their infection to a sexual partner.
- People with HIV have been imprisoned in the UK for passing their infection without intending to do so.
- No HIV positive person has been imprisoned in the UK for having sex with a negative person who did not get HIV.

Men were asked *Did you know this already?*, and to indicate one of four options for each statement: *I knew this; I didn't know this; I wasn't sure; or I don't understand this.* Men were also asked *Would you know how to get expert legal advice about HIV transmission if you needed it?*

Young I, Flowers P, McDaid L. Can a pill prevent HIV? Negotiating the biomedicalisation of HIV prevention. *Sociology of Health & Illness*. 2016;38(3):411-425.

This article examines how biomedicalisation is encountered, responded to and negotiated within and in relation to new biomedical forms of HIV prevention. We draw on exploratory focus group discussions on pre-exposure prophylaxis (PrEP) and treatment as prevention (TasP) to examine how the processes of biomedicalisation are affected by and affect the diverse experiences of communities who have been epidemiologically framed as 'vulnerable' to HIV and towards whom PrEP and TasP will most likely be targeted. We found that participants were largely critical of the perceived commodification of HIV prevention as seen through PrEP, although this was in tension with the construction of being medical consumers by potential PrEP candidates. We also found how deeply entrenched forms of HIV stigma and homophobia can shape and obfuscate the consumption and management of HIV-related knowledge. Finally, we found that rather than seeing TasP or PrEP as 'liberating' through reduced levels of infectiousness or risk of transmission, social and legal requirements of responsibility in relation to HIV risk reinforced unequal forms of biomedical self-governance. Overall, we found that the stratifying processes of biomedicalisation will have significant implications in how TasP, PrEP and HIV prevention more generally are negotiated.

LEGAL AND PUBLIC HEALTH ANALYSIS

United States

AIDS Law Project of Pennsylvania, SERO Project, PWN-USA-Philadelphia. *All pain, no gain: HIV criminalization in Pennsylvania*. AIDS Law Project of Pennsylvania; 2016. Available at: <http://www.aidslawpa.org/wp-content/uploads/2016/04/LATEST-4-20-2016-ALL-PAIN-NO-GAIN-HIV-CRIMINALIZATION-IN-PA.pdf>.

Pennsylvania does not have HIV-specific criminal laws mandating disclosure of one's HIV positive status prior to engaging in intimate sexual contact. Nor does it specifically outlaw the perceived, potential or actual HIV exposure or transmission. Instead, Pennsylvania uses generally applicable criminal laws to prosecute people with HIV even when the act in question has little or no risk of transmitting HIV. Other crimes may be charged depending on the specific allegations. Pennsylvania does, however, have HIV-specific sentencing enhancements for prisoners and sex workers.

Note: The report was collectively prepared by the AIDS Law Project of Pennsylvania, SERO Project, and Positive Women's Network – USA Philadelphia Regional Chapter. It includes general laws used in HIV non-disclosure cases, and description and outcomes of several criminal cases in Pennsylvania.

Baskin S, Ahmed A, Forbes A. Criminal laws on sex work and HIV transmission: mapping the laws, considering the consequences. *Denv. L. Rev.* 2015;93:355.

Lawmakers historically justify the mobilization of criminal laws on prostitution and HIV as a means of controlling the spread of disease. Over time, however, public health research has conclusively demonstrated that criminal laws on prostitution and HIV significantly impede the ability of sex workers to access services and to live without the stigma and blame associated with being a transmitter of HIV. In turn, mainstream public health approaches to sex work and HIV emphasize decriminalization as a way to improve the lives of sex workers in need of care, treatment, and services. Our current legal system, which criminalizes both prostitution and HIV transmission and exposure, is not in keeping with this decriminalization frame and instead compounds criminal penalties on people charged with prostitution related crimes and undermines HIV efforts.

This article presents a public health law mapping of U.S. states that mandate HIV testing and criminalize HIV positive sex workers. The mapping demonstrates that laws on HIV transmission and exposure interact with laws on sex work to compound criminal penalties on people charged with prostitution related crimes. In keeping with public health evidence, this article argues that decriminalization of sex work and HIV transmission and exposure is integral to effectively address the HIV epidemic. The article seeks to contribute to a growing literature on the necessity of decriminalizing sex work by uncovering how these laws interact to undermine the HIV response.

Cockerill R, Wahlert L. AIDS panic in the twenty-first century: the tenuous legal status of HIV-positive persons in America. *J Bioeth Inq.* 2015;12(3):377-381.

Thirty-four states criminalize HIV in some way, whether by mandating disclosure of one's HIV status to all sexual partners or by deeming the saliva of HIV-positive persons a "deadly weapon." In this paper, we argue that HIV-specific criminal laws are rooted in historical prejudice against HIV-positive persons as a class. While purporting to promote public health goals, these laws instead legally sanction discrimination against a class of persons.

Cox B. Turning the tide: The future of HIV criminalization after *Rhoades v. State* and legislative reform in Iowa. *Nw. JL & Soc. Pol'y.* 2016;11:28.

This Note begins with an overview of the current scientific knowledge of HIV transmission and the historical background of HIV in American criminal law. Next, I discuss Iowa's old HIV criminalization law, the Iowa Supreme Court's opinion in *Rhoades*, and Iowa's concurrent legislative change. Finally, I discuss the future implications of *Rhoades* in Iowa and elsewhere. Though concurrent legislative reform in Iowa makes the court's decision less important as binding precedent, I argue that the decision remains relevant in Iowa, and more importantly provides valuable persuasive precedent to guide reform efforts nationwide. The force of the decision as persuasive precedent varies significantly from state to state depending on each state's current approach to HIV criminalization. In all states, however, I argue that advocates can and should aggressively use the Iowa precedent to support attacks on HIV criminalization, whether at the trial, sentencing, appellate, parole, or post-conviction relief stages. Moreover, I argue that advocates should also draw upon the Iowa experience to advocate for legislative reform or, in the absence of legislative reform, to urge prosecutors to exercise their discretion not to pursue most HIV criminalization cases.

Criminalization of HIV exposure work group. *Questions and concerns related to the practice and ethics surrounding expanded use of HIV/AIDS surveillance data and criminalization of HIV non-disclosure.* New Haven, CT: Center for Interdisciplinary Research on AIDS at Yale University; 2013.

New uses of HIV/AIDS public surveillance data may be justified on the basis of how they can help identify people at risk of or living with HIV who need assistance with accessing, returning to, or staying in care. In response to two recent publications on expanding the use of surveillance data,* the Criminalization of HIV Exposure Work Group developed a set of recommendations for the surveillance efforts to identify and reengage people living with HIV in care with restrictions that would limit their use for the prosecution of HIV. The work group is facilitated by the Center for Interdisciplinary Research on AIDS at Yale University and includes a broad range of academics, public health and law enforcement experts, and advocates from many different institutions.

* Sweeney et al. Shifting the paradigm: using HIV surveillance data as a foundation for improving HIV care and preventing HIV infection. *The Milbank Quarterly.* 2013 Sep 1;91(3):558-603.

* Project Inform. Using surveillance and other data to improve HIV care linkage and retention. San Francisco, CA: Project Inform; 2013.

Criminalization of HIV exposure work group. *Resolution: Calling for research on the impact of the criminalization of HIV exposure on women.* New Haven, CT: Center for Interdisciplinary Research on AIDS at Yale University; 2015.

Thirty-four US states and territories now have HIV-specific criminal laws. Sixteen of US states and territories specifically address persons living with HIV who engage in sex work. A study of a single metropolitan area revealed that over half of all persons arrested for HIV-related crimes were women. Yet very little research has been conducted on the specific impacts on women of laws and policies that criminalize HIV transmission and exposure. This lack of research continues despite the fact that a majority of sex workers in the US are female and that sex workers are at particular risk for arrest for HIV exposure offenses. Sex workers may also face much more severe consequences when arrested for HIV-related charges than those who are not sex workers. The Criminalization of HIV Exposure Work Group released a call for research on the impact of criminalization of HIV exposure on women including sex workers. The document describes potential consequences of the HIV criminal laws on women and includes recommendations for prioritized research areas. The work group is facilitated by the Center for Interdisciplinary Research on AIDS at Yale University and includes a broad range of academics, public health and law enforcement experts, and advocates from many different institutions.

Fan MD. *Sex, Privacy, and Public Health in a Casual Encounters Culture.* *UC Davis L. Rev.* 2011;45:531-1945.

The regulation of sex and disease is a cultural and political flashpoint and recurring challenge that law's antiquated arsenal has been hardpressed to effectively address. Compelling data demonstrate the need for attention — for example, one in four women aged fourteen to nineteen is infected with at least one sexually transmitted disease (“STD”); managing STDs costs an estimated \$15.9 billion annually; and syphilis, once near eradication, is on the rise again, as are the rates of HIV diagnosis among people aged fifteen to twenty-four. Public health officials on the front lines have called for paradigm changes to tackle the enormous challenge. Controversial proposals have circulated, such as mass HIV screening for everyone aged thirteen to sixty-four, STD testing in high schools, mandatory HIV screening, strict liability in tort for HIV transmission, and criminalizing first-time sex without a condom. This article argues that we should explore informational interventions beyond the cumbersome and costly regulatory regimes of criminal and tort law and the STD-surveillant state. The article proposes devolving information and power currently centralized in the state to people in the marketplace for sex and romance to ameliorate the information deficit that impedes informed consent to risk exposure. Information can be both a carrot and a stick. Providing more reliable ways to verify STD status and seeding a healthier culture of verification can be encouragement to get tested to enhance self-advertising. Rather than criminalization, which comes at too great a cost and too late, preventative privacy-piercing can be an alternative approach to deter the small subset of serial STD spreaders.

Fernandez FL. *Hands up: A systematized review of policing sex workers in the US* [master's thesis]. New Haven, CT: School of Public Health, Yale University; 2016.

This work lays the foundation for a study of criminalization and its effects on the health of street-based sex workers in the U.S. seeking to: 1) conduct a systematized review of sources from across the country settling on seventeen that describe experiences of harassment, false arrests, theft, physical abuse, sexual assault, HIV criminalization, survival tactics, reporting practices, and positive relations with law enforcement and 2.) compare the U.S. literature to international research, reflecting on the ways that public health researchers remain complicit in sustaining these harmful institutions by failing to consider diversity, the criminalized context of sex work, the links between policing and health, and the importance of collaboration. Through a radical framework of health and human rights I propose centering the experiences of street-based sex workers in a moment when the U.S. is renegotiating its relationship with law enforcement.

Finitsis DJ, Stall RD, Friedman SR. Theory, analysis, social justice, and criminalizing HIV transmission: a commentary on Lehman and colleagues (2014). *AIDS Behav.* 2014;18(6):1007-1010.

Since the start of the AIDS epidemic, the US government has attempted a number of interventions to protect the public health. Some, such as Congressional allocation of funds for HIV surveillance and research, or assistance to persons living with HIV such as subsidized treatment or housing, appear to have promoted this aim. Others such as the Helms amendment banning federal funds for AIDS education materials describing homosexuality, bans on Federal funding for syringe exchange, the US public health service travel ban on entry visas for people living with HIV, or the PEPFAR anti-prostitution pledge have probably undermined it. These mixed effects suggest that scientific data measuring the outcomes of policies proposed to protect the public health are not the deciding factor on whether such policies become federal law. State governments have also had a role, but until now it has been challenging to evaluate the scope of state-level HIV law in its entirety. In their article, Prevalence and Public Health Implications of State Laws that Criminalize Potential HIV Exposure in the United States, Lehman and colleagues take stock and analyze state laws criminalizing HIV exposure. Their paper offers an excellent exploration of the differing ways states (1) define criminal HIV exposure; (2) classify it within the legal code; and (3) impose penalties on those it finds guilty. In this commentary, we expand upon the ideas put forth by Lehman and colleagues. We explore methodological challenges to the study of how law impacts individual HIV risk behavior and suggest theoretical frameworks and testable models to understand this phenomenon. We conclude with a consideration of how the principle of social justice joins this arena as a necessary research question in its own right.

Forbes A. Speaking of sex workers: How suppression of research has distorted the United States' domestic HIV response. *Reprod Health Matters.* 2015;23(45):21-29.

Sex workers remain a vulnerable population at risk for HIV acquisition and transmission. Research suggests that interventions at the individual level, such as condom distribution, are less effective in preventing HIV among sex workers than structural changes such as allowing safer work settings and reducing the harassment and abuse of sex workers by clients and police. In the US, HIV incidence has not declined in the last decade. This may be due in part to its policy of wilful ignorance about sex work, but the data to resolve the question simply do not exist. Political actions such as PEPFAR's prostitution pledge and a congressional campaign against "waste, fraud and abuse" in research are products of an ideological environment that suppresses research on HIV prevention and treatment needs of sex workers. Even basic prevalence data are missing because there is no "sex worker" category in the US National HIV Behavior Surveillance System. However, international efforts are taking a public health approach and are calling for decriminalization of sex work, as the most effective public health strategy for reducing HIV incidence among sex workers. Although such an approach is not yet politically feasible in the US, some urgent practical policy changes can be implemented to improve data collection and generation of evidence to support HIV prevention and treatment programs targeting sex workers.

Frost S. HIV criminalization laws: A poor public policy choice in the new era of PrEP. *Wake Forest JL & Pol'y.* 2016;6:319.

No minority group has seen a more dramatic shift in legal status over the past decade than the Lesbian, Gay, Bisexual, and Transgender ("LGBT") community. Beyond the fight over marriage equality, LGBT rights have moved to the forefront of political and social culture throughout the United States. One area that has not seen the same "shift" is public policy related to the human immunodeficiency virus ("HIV"). Largely considered an LGBT issue, transmission rates have been stable in recent years but have seen increases in some larger urban areas and amongst various social groups. Although people of any sexuality can contract HIV, policy surrounding HIV focuses on the LGBT community because LGBT individuals "remain the population most profoundly affected by HIV." A potential rationale for the increase in HIV transmission rates is the continued prevalence of HIV criminalization laws. While the reasoning behind HIV criminalization laws has always been questionable, these laws are particularly destructive today. The availability of HIV preventative medication Truvada, often referred to as "PrEP" (short for pre-exposure prophylaxis) when used to prevent HIV exposure, increases the degree with which HIV criminalization laws represent poor public policy. In order to effectively combat HIV transmission in the United States, public policy must adapt. The first step in changing public policy is repealing HIV criminalization laws. Particularly in a world with PrEP, criminalizing HIV transmission no longer makes sense and is likely hindering the fight to combat HIV incidence. The next step is refocusing public policy

around positive ways to fight HIV, like PrEP. This comment will first look generally at HIV and the continued prevalence of HIV criminalization laws. Section II will explore PrEP and its potential to change the fight against HIV and reduce HIV incidence in the United States. Section III will examine the public policy surrounding HIV criminalization laws and describe how these laws have never made sense from a public policy standpoint. Finally, Section IV will discuss how the landscape has changed because of PrEP, making HIV criminalization laws virtually obsolete and ineffective. Section IV also analyzes recent developments in this area, including a look at very recent convictions and the early results from the use of PrEP.

Galletly C, Lazzarini Z, Sanders C, Pinkerton SD. Criminal HIV exposure laws: moving forward. *AIDS Behav.* 2014;18(6):1011-1013. PMC4084714.

Note: The authors report that despite a number of recent critical commentaries, advocacy efforts, guidance documents, and empirical research looking into the criminalization of HIV exposure, there has not been a repeal to the law in any US states or an amendment conforming to guidance endorsed by advisory groups by limiting the application of the law to intentional transmission cases. The authors call for efforts to better understand "*the structures, politics, and beliefs that sustain these laws and drive their continued enforcement.*"

Hanssens C, Moodie-Mills AC, Ritchie AJ, Spade D, Vaid U. *A roadmap for change: federal policy recommendations for addressing the criminalization of LGBT people and people living with HIV.* Center for Gender & Sexuality Law, Columbia Law School; 2014. Available at:

http://www.law.columbia.edu/sites/default/files/microsites/gender-sexuality/files/roadmap_for_change_full_report.pdf.

This document outlines a range of policy solutions that would go a long way towards addressing discriminatory and abusive policing practices, improving conditions for lesbian, gay, bisexual, transgender, Two Spirit, queer, questioning and gender non-conforming (LGBT) prisoners and immigrants in detention, decriminalizing HIV, and preventing LGBT youth from coming in contact with the system in the first place. Additionally, we identify many areas of opportunity for the federal government to support improved outcomes for LGBT people and eliminate some of the systemic drivers of incarceration through federal programs relating to housing, employment, health care, education, immigration, out of home youth, violence response and prevention, and social services. Above all, the goal of this brief is to set forth a roadmap of policy actions that the federal government can take to reduce the criminalization of LGBT people and people living with HIV (PLWH), particularly people of color who are LGBT and/or living with HIV, and address significant safety concerns faced by these populations when they come in contact with the criminal justice system.

Hoppe T. *Punishing disease: HIV and the criminalization of sickness.* Oakland, CA: University of California Press; 2017.

From the very beginning of the epidemic, AIDS was linked to punishment. Calls to punish people living with HIV—mostly stigmatized minorities—began before doctors had even settled on a name for the disease. *Punishing Disease* looks at how HIV was transformed from sickness to badness under the criminal law and investigates the consequences of inflicting penalties on people living with disease. Now that the door to criminalizing sickness is open, what other ailments will follow? With moves in state legislatures to extend HIV-specific criminal laws to include diseases such as hepatitis and meningitis, the question is more than academic.

Jansson M. *An economy of protection: agency, responsibility and the criminalization of HIV.* *Women's Studies International Forum.* 2018;69:171-179.

This article analyzes the protection logic that legitimizes criminalization and investigates how this logic affects gender and state-citizen relations. Viewing criminalization as a political response to the challenge HIV poses to the post-Cold War security state, the article examines the intersection between protection as a pretext for controlling vulnerable groups and criminalization as a way to withdraw protection. The article analyzes the constructions of those in need of protection (referents) and the providers of protection according to HIV-specific state laws and media reports of arrests and prosecutions, and it shows that the requirements for being considered worthy of protection are highly gendered. The article argues that laws and the media construct the

idea that a popular demand for protection exists and that criminalization practices are produced as the supply needed to meet this demand.

Latham SR. Time to decriminalize HIV status. *Hastings Center Report*. 2013;43(5):12-13.

Note: The author calls for HIV status decriminalization and outlines the following key reasons:

- *Many of the statutes and cases on the books rest on an understanding of HIV transmission that is out of date, and they criminalize conduct, such as spitting or scratching, that has no real potential to transmit HIV.*
- *HIV criminalization does not help reduce the spread of HIV/AIDS since the majority of new HIV infections result from sexual conduct by individuals who do not know their serostatus.*
- *HIV criminalization may interfere with the ability of public health and medical workers to communicate effectively with members of high-risk communities.*
- *HIV criminalization laws are often enforced unfairly and impose severe punishment to the actual harm inflicted or intended.*
- *Criminalization has unintended collateral consequences in other areas of law such as custody proceedings.*
- *It is morally wrong to subject that person to criminal prosecution on the basis of his or her disease status.*

Lazzarini Z, Galletly CL, Mykhalovskiy E, Harsono D, O'Keefe E, Singer M, Levine RJ. Criminalization of HIV transmission and exposure: research and policy agenda. *Am J Public Health*. 2013;103(8):1350-1353. PMC3966663.

More than half of US jurisdictions have laws criminalizing knowing exposure to or transmission of HIV, yet little evidence supports these laws' effectiveness in reducing HIV incidence. These laws may undermine prevention efforts outlined in the US National HIV/AIDS Strategy, in which the United States has invested substantial federal funds. Future research should include studies of (1) the impact of US HIV exposure laws on public health systems and practices; (2) enforcement of these laws, including arrests, prosecutions, convictions, and sentencing; (3) alternatives to HIV exposure laws; and (4) direct and opportunity costs of enforcement. Policy efforts to mitigate potential negative impacts of these laws could include developing prosecutorial guidelines, modernized statutes, and model public health policies and protocols.

Martin T. Judging HIV criminalization: failures of judges and commentators to engage with public health knowledge and HIV-positive perspectives. *UC Irvine L. Rev*. 2014;4:493.

This Note is divided into four parts. Part I briefly describes recent advocacy against HIV criminalization, focusing on government interventions such as the REPEAL Act, and argues that legal commentary on HIV criminalization has not fully realized its potential to inform such interventions because it has devoted relatively little attention to judicial decision making. In Part II, I examine recent appellate opinions rendered in HIV exposure prosecutions, along with related cases and commentaries, to identify recurring failures to engage with public health knowledge and HIV-positive perspectives. In Part III, I draw on Suzanne Goldberg's work on judicial intuitions in sexual orientation cases¹ to offer brief thoughts on how legal professionals might encourage judges' engagement with these sources of knowledge. Finally, I conclude in Part IV with an anecdote from an AIDS Coalition to Unleash Power (ACT UP) lawyer and an appeal to the profession.

McCallum A. Criminalizing the transmission of HIV: consent, disclosure, and online dating. *Utah L. Rev*. 2014:677.

Part I briefly describes the ambiguities surrounding the consent and disclosure exceptions that pose novel problems for HIV-positive online daters in the context of criminalization. Part II of this Note briefly tracks the history of criminal statutes specific to HIV transmission. It also surveys the statutes that criminalize sexual transmission of HIV but provide exceptions for consent and disclosure. Lastly, Part II surveys the world of online dating and the reasons why e-dating may be particularly attractive to those living with HIV. Part III looks at the inherent flaws in state disclosure and consent provisions and raises substantive-due-process concerns relative to these flaws. Next, the analysis section provides four scenarios—the first three demonstrate how assumptions about online community norms increase the opportunity for good-faith mistakes, and the fourth

presents a scenario where substantive-due-process rights may be implicated. Lastly, this Note presents a model statute and jury instruction that aim to address these problems.

National Alliance of State and Territorial AIDS Directors (NASTAD) and the National Coalition of STD Directors (NCSD). *Addressing stigma: A blueprint for HIV/STD prevention and care outcomes for Black and Latino gay men.* 2014. Available at: <https://www.nastad.org/sites/default/files/NASTAD-NCSD-Report-Addressing-Stigma-May-2014.pdf>.

The National Alliance of State and Territorial AIDS Directors (NASTAD) and the National Coalition of STD Directors (NCSD) published the blueprint that contains 17 recommendations for reducing public health stigma that prevents Black and Latino gay men and other men who have sex with men (MSM) from receiving optimal health care. Through support from the MAC AIDS Fund, NASTAD and NCSD conducted a three-year study of stigma and its impact on public health practice for Black and Latino gay men/MSM. This work included a national survey of more than 1,300 respondents; the convening of a panel of stakeholders and medical providers; the publication of "Optimal Care Checklists" for providers and for Black and Latino gay male patients; and the convening of a National Stigma Summit on Black and Latino Gay Men's Health. The recommendations contained in the blueprint follow many consultations with national organizations that serve Black and Latino gay men/MSM, health departments and community stakeholders.

Note: In the context of criminalization, the authors report that "*Subsequent analyses showed that state policies related to HIV criminalization, immigration, and LGBT rights were shown to be related to HIV incidence and prevalence, as well as state-level perceptions of community/institutional stigma. Findings showed that states with HIV criminalization policies had higher HIV incidence and prevalence than states without criminalization policies.*"

Newman SJ. *Prevention, not prejudice: The role of federal guidelines in HIV-criminalization reform.* *Nw. UL Rev.* 2012;107:1403.

Thirty-four states and two U.S. territories have criminal statutes that specifically impose criminal liability for HIV transmission, exposure, or nondisclosure. With possible sentences ranging up to thirty years, these statutes have even provided the basis for convicting HIV-positive individuals who never actually transmitted the virus. To address the unreasonable prosecutions of these individuals, Representative Barbara Lee of California introduced the Repeal Existing Policies that Encourage and Allow Legal HIV Discrimination Act (REPEAL Act) to the U.S. House of Representatives on September 23, 2011. If passed, the REPEAL Act would require a systematic review of these statutes and the development of new federal guidelines to guide nationwide HIV criminalization reform. This Note investigates the federal government's previous attempts at setting national guidelines for HIV criminalization and offers recommendations for improvements that could be made under the REPEAL Act. In particular, I argue that HIV-specific statutes should be reformed, not repealed. To that end, I urge Congress to adopt new federal guidelines that provide clearer notice of scientifically established modes of HIV transmission, set adequate procedural safeguards to prevent unfair prosecutions, establish guidelines for proportionate sentencing, and guarantee adequate federal funding for reform.

Perone A. *From punitive to proactive: An alternative approach for responding to HIV criminalization that departs from penalizing marginalized communities.* *Hastings Women's LJ.* 2013;24:363.

Scientific knowledge has dramatically changed our understanding of HIV and the transmission of HIV. Recent studies further suggest that HIV criminalization laws do not prevent the spread of HIV and, if anything, increase it through misinformation about transmission. Research also suggests that disclosure of HIV status is complex and affected by varying power differentials between sexual partners, violence, and one's understanding of his or her viral load or health status. As such, this article recommends eliminating HIV criminalization laws and adopting new approaches for reducing HIV rates. Part I provides a historical context by exploring the fear of AIDS that prompted states to pass laws criminalizing HIV-related offenses. Part II explains the various ways in which states penalize people with HIV through criminal laws. Part III discusses how these laws perpetuate inequality by (1) using broad language that can allow biases based on race, class, gender, and sexual orientation to pervade the criminal process; (2) spreading misinformation about HIV and undermining public health efforts that increase awareness and reduce fear of HIV; and (3) failing to acknowledge important power dynamics that may prompt someone not to disclose his or her HIV status. Part IV explores a multi-pronged approach (the Proactive Pyramid) for responding to the criminalization and

discrimination of people with HIV that includes (1) engaging communities heavily impacted by HIV by tapping into the tools developed in response to criminalization and discrimination; (2) increasing education to reduce stigma; (3) repealing and/or reforming legislation that criminalizes people with HIV; and (4) reducing structural barriers to HIV prevention and treatment.

Project Inform. *Using surveillance and other data to improve HIV care linkage and retention.* San Francisco, CA: Project Inform; 2013. Available at: https://www.projectinform.org/pdf/surveillance_0313.pdf.

On November 6 and 7, 2012, Project Inform brought together 30 HIV community advocates and public health officials as a “Think Tank” to explore a number of questions regarding the active use of laboratory data (e.g., CD4 count and viral load)—collected by many departments of public health—to identify individuals who either were never linked to HIV care or who fell out of care. Based on this data, efforts would then be made to link those individuals to health care and other services. The Think Tank was a timely addition to national discussions about the degree to which public health departments may use surveillance and other data more actively than in the past to promote the health of people living with HIV and to prevent ongoing transmission. In fact, a number of jurisdictions in the United States and its territories already have projects that use collected data for HIV care linkage and retention purposes underway or in the planning stages.

Note: In the context of criminalization, the Think Tank participants recommend that the health departments *"should seriously consider the local reality on the ground including the availability of local social services to address care linkage and retention barriers, the current and historical relationship between the health department and the community and likelihood of criminal prosecution for HIV non-disclosure or exposure new public health interventions."*

Sabharwal S, Mitchell JW, Fan VY. Should There Be a Disclosure Mandate for Physicians Caring for Perinatally Infected Adolescents Who Don't Know Their HIV Serostatus? *AMA Journal of Ethics.* 2018;20(8):743-749.

With advances in antiretroviral therapies, perinatally infected children are now living with HIV well beyond adolescence. Parents and health care practitioners thus face the challenge of deciding how best to disclose positive serostatus to children living with HIV. Although many adolescents living with HIV are sexually active, parents often delay disclosure, which presents US physicians with an ethical dilemma because there is no legal requirement to follow clinical guidelines recommending disclosure prior to adolescence. When they become adults, US adolescents could face criminal penalties if they fail to disclose their positive serostatus to needle-sharing or sex partners despite there being no legal mandates to ensure that adolescents are first properly informed of their own diagnoses. We argue that there is an urgent need to bridge this gap between adolescent and adult HIV serostatus disclosure policies.

Schwartz SL. *Who should've known better? Judgments of negligent sexual transmission of an STD as a function of STD type, litigant sexual orientation, and commitment* [dissertation]. Lincoln, NE: Department of Psychology, University of Nebraska-Lincoln; 2010.

People tend to blame individuals who contract HIV from sexual conduct, particularly between men. However, this tendency may not be as straightforward when the perceiver weighs judgments of the victim against judgments of the harmdoer. This study examined whether mock juror decision making about negligent transmission of an STD varied as a function of case factors and individual decisionmaker characteristics. Undergraduate mock jurors made a number of legal and psychological judgments, based on an audio-taped civil trial transcript that varied by the type of STD transmitted (HIV or genital herpes), litigant sexual orientation (heterosexual or gay), and type of commitment between the litigants during their sexual relationship (one-night stand, 8 month commitment, 5 year commitment including cohabitation, or 5 year commitment including marriage). Mock jurors also completed a series of individual difference measures. Findings revealed that some of the case factors led to more favorable judgments of the plaintiff, whereas other case factors had the opposite effect. Mock jurors tended to find the plaintiff more responsible when type of commitment was less serious. This was evident in verdict judgments of the heterosexual litigants such that mock jurors were more likely to favor the plaintiff in the eight-month commitment condition, compared to the plaintiff in the one-night stand condition. Some of the effects of the case factors depended on mock juror gender. For example, men's verdict judgments were (somewhat) more biased in favor of the plaintiff when the plaintiff was gay and when type of STD was genital herpes, whereas women's verdict judgments tended to reflect the opposite effects.

Judgments also differed by individual differences in HIV stigma, antifemininity bias, and religious fundamentalism, but some of those differences depended on litigant sexual orientation and type of commitment. For example, mock jurors with stronger religious fundamentalist beliefs were more likely to punish the defendant overall, but they were particularly likely to punish the heterosexual defendant who had a one-night stand with the plaintiff and the defendant who had a same-sex marriage to the plaintiff, suggesting that the pairings of those case factors incited the influence of religious fundamentalist beliefs on verdict judgments.

Stephens SN. Ending HIV: Stigma, fear-based policing, and criminalization in Louisiana through training of law enforcement and prosecutors. *Southern University Law Review*. 2017.

Human immunodeficiency virus, commonly known as HIV is a lentivirus that if left untreated, can lead to acquired immunodeficiency virus, commonly known as AIDS. Currently, HIV/AIDS affects more than 1.2 million people living in the U.S, and 1 out of 8 people are not even aware that they have contracted HIV. HIV emerged during the 1980's, and was originally seen as a type of cancer because of the severity of the disease, and the almost immediate manner in which it claimed an infected person's life. Since then, many strides have been made medically in improving the quality and length of life of those who have contracted HIV. Despite these medical advancements, those who have contracted HIV now have obstacles to face criminally. In response to the growing population of persons living with HIV/AIDS, state legislatures created and enacted laws governing the activities of intentional exposure to HIV, intentional transmission of HIV, and disclosure of HIV status to partners. Laws vary from each state regarding what behavior is criminalized, and the penalties imposed if a person is found guilty. In Louisiana, La. R.S. 14:43.5 was enacted in 1987, and criminalizes the intentional exposure to the AIDS virus. The issues with the Louisiana statute are 1) that exposure to the AIDS virus does not necessarily equate to transmission; and 2) some of the behaviors defined, as exposure in the statute will not actually transmit HIV/AIDS. Thus, there has been an emergence of many cases where persons are arrested, tried, and convicted of intentional exposure, where there was little to no rate of transmission of the virus.

As of recently, there has been a movement to change the language of the statute to align with the scientific definitions of transmission, and end the criminalization of ordinary behaviors, which will not lead to contracting HIV. This comment serves to argue that amending La. R.S. 14:43.5 is not enough to affect change in the criminalization of persons living with HIV/AIDS in Louisiana; and urges to also include mandatory HIV/AIDS training of law enforcement officers and prosecutors. By including law enforcement officers and prosecutors in the reform of HIV-specific laws, there is a chance to affect change in the way arrests are made and cases are tried.

Valdiserri RO, Holtgrave DR. Ending America's HIV Epidemic: Why the National HIV/AIDS Strategy Still Matters. *AIDS Behav*. 2018;22(7):2033-2041.

Note: This commentary is focused on the continuing relevance of NHAS as a well-reasoned strategy to end HIV in the U.S. In the context of criminalization, the authors recall the 2015 NHAS update that called upon state legislatures "to review HIV-specific criminal statutes to ensure that they are consistent with current scientific knowledge...and support public health approaches to preventing and treating HIV". Although there is still more to be done to reform the laws, the laws highlight an example of legal actions in California that modernized outdated criminalization laws.

Waldman AE. Presumptive criminals: US criminal law and HIV-related aggravated assaults. In: Peterson D, Panfil VR, eds. *Handbook of LGBT Communities, Crime, and Justice*. New York, NY: Springer; 2014:363-385.

In choosing to criminalize the attempted spread of the Human Immunodeficiency Virus (HIV), several United States jurisdictions not only ignore the public health harms associated with their draconian approach, but also commit logical and due process errors in their prosecutions, thus discriminating against the HIV-positive population. In this chapter, I consider a common case where jurisdictions use aggravated assault—an assault by means likely to produce grievous bodily harm or death. By looking at several cases in depth, I show that certain courts use a guilt-by-association rule, sweeping in all HIV-positive individuals under the criminal law regardless of the likelihood of transmission, which is a key element in any aggravated assault charge. Many courts do not distinguish between those who have high viral loads and those who virtually cannot transmit the disease at all—namely, those who are on highly active antiretroviral therapy, have an undetectable

viral load, use condoms, and have no sexually transmitted infections. The chapter concludes by highlighting the discriminatory effect of criminalization.

White G. Pre-exposure prophylaxis (PrEP) and criminal liability under state HIV laws. *Yale Law Journal Forum*. 2016;126:77.

This essay assesses PrEP's implications for state HIV laws. While scientists believe that the new "miracle drug" is just as effective as a condom (if not more so), PrEP is not a defense to a violation of most HIV criminal statutes (whereas condoms sometimes are). The advent of PrEP has not reduced the scope of criminal liability for HIV-positive individuals. In other words, an HIV-positive person who has sex with a PrEP-using partner commits a felony in most states, unless the partner is informed of that person's HIV-positive status. To be sure, HIV-positive individuals should always disclose their status to sexual partners. But the punishment here—a felony conviction and possibly decades in prison—is grievously disproportionate given the negligible risk of transmission. This essay then urges state legislators to reform their HIV criminal statutes, and suggests several state laws that can serve as models for nationwide reform.

Yang YT, Underhill K. Rethinking criminalization of HIV exposure - lessons from California's new legislation. *N Engl J Med*. 2018;378(13):1174-1175.

Laws that criminalize certain behaviors on the basis of the person's HIV status have long been challenged as ineffective prevention measures that harm public health. They are nevertheless widespread: according to the Center for HIV Law and Policy, 34 states have HIV-specific criminal statutes, and 23 have applied more general laws (e.g., against assault with a deadly weapon) in order to criminalize HIV exposure. Most of these laws don't reflect current evidence regarding protective factors such as antiretroviral treatment (ART), and many encompass behaviors that carry negligible risk. California is now breaking from these precedents. In October 2017, Governor Jerry Brown signed SB 239, which reduces the criminal charges associated with exposing a sexual partner to HIV without disclosing one's HIV status. In place of former felony charges, California will impose misdemeanor charges that carry a maximum of 6 months of jail time and will reserve penalties for intentional disease transmission. The law also repeals felony charges for solicitation (prostitution) by people who have tested positive for HIV, and it decriminalizes their donation of blood or tissue.

Canada

Dej E, Kilty JM. "Criminalization creep": A brief discussion of the criminalization of HIV/AIDS non-disclosure in Canada. *Canadian Journal of Law & Society/La Revue Canadienne Droit et Société*. 2012;27(1):55-66.

This research note begins by situating some of the major areas of inquiry within social-science research on the criminalization of HIV/AIDS non-disclosure. The evolution of the use of this criminal justice measure in the attempt to regulate HIV/AIDS transmission illustrates what has been termed "criminalization creep," whereby steadily increasing numbers of people are charged with increasingly severe crimes. We outline some of the key and precedent-setting cases in Canadian law in order to explore the problematic of criminalization and suggest avenues for future research on this subject.

Mykhalovskiy E. Making science count: Significant risk, HIV non-disclosure and science-based criminal law reform: A reflexive analysis. In: Stanton C, Quirk H, eds. *Criminalising Contagion: Legal and Ethical Challenges of Disease Transmission and the Criminal Law*. Cambridge, England: Cambridge University Press; 2016:150-174.

In Canada, the criminal law governance of HIV non-disclosure is produced through complex relations of knowledge in which discourses of risk, individual rights and autonomy are paramount. Drawing on an institutional ethnography, this chapter reflexively explores how Canadian activists concerned about HIV criminalisation have sought to intervene in those knowledge relations. I argue that ambiguities in legal notions of risk have been a central feature not only of the discursive organisation of criminal law regulation of HIV non-disclosure, but of activist efforts to intervene in that governance. I conceptualised those efforts as a form of science-based criminal law reform through which people living with HIV, lawyers, community workers and others have sought to intervene in the text-mediated relations of criminal law regulation by translating epidemiological risk knowledge for criminal justice settings. The chapter explores the writing practices and

ethical dilemmas associated with such translation efforts. Through an analysis of the 2012 Supreme Court of Canada decision in *R v Mabior*, it also points to the successes, limitations, complexities and unintended consequences of mobilising scientific knowledge in HIV-related criminal law reform.

O'Byrne P. HIV, nursing practice, and the law: what does HIV criminalization mean for practicing nurses. *J Assoc Nurses AIDS Care*. 2011;22(5):339-344.

In Canada, criminal prosecutions against people living with HIV have increased over the last few years (Cameron, 2009). Since a 1998 Supreme Court of Canada ruling, which established that people living with HIV must disclose their HIV status (referred to as serostatus) in certain cases, not only have there been 96 prosecutions, but there has also been an increase in the severity of the charges that have been laid; for example, while the initial 1998 Supreme Court ruling was an aggravated assault charge, prosecutions in recent years have increased to first-degree murder charges in one case (Canadian HIV/AIDS Legal Network [CHALN], 2010). Compounding this criminalization trend is the fact that the punitive measures associated with serostatus nondisclosure have also increased (e.g., in May 2010, the police in Ottawa, Canada, released the name, photograph, and serostatus of a gay man who they alleged did not disclose his serostatus to previous sexual partners; to view this police-based media release please see CTV, 2010). Because many nurses provide HIV care and can become involved in such cases, it is important that these practitioners reflect on HIV criminalization so as to either address what is occurring in their own jurisdictions or to proactively acknowledge that such a situation could materialize in their own regions. To facilitate a discussion on this topic, the Canadian context will be used to (a) review HIV criminal law, (b) outline potential effects of these laws, and (c) make recommendations for practice. These suggestions should be interpreted as what they are: points to incite debate among the world's largest group of health professionals.

Wilson CL. The impact of the criminalization of HIV non-disclosure on the health and human rights of "black" communities. *Health Tomorrow: Interdisciplinarity and Internationality*. 2013;1(1):109-143.

The criminalization of HIV non-disclosure has become a hot topic for discussion and debate amongst human rights advocates, HIV/AIDS service providers, and people infected and affected by HIV/AIDS. This paper explores the inherent problems with HIV non-disclosure laws. These laws are ambiguous and pose a serious threat to public health policy and programming by obstructing the fundamental human rights of people infected and affected by HIV/AIDS. Using a human rights framework, this paper explores the impact of non-disclosure laws on the health and rights of African, Caribbean, and Black-Canadian communities and proposes ways to address the shortcomings of HIV non-disclosure laws and inadequate social policies.

Global Perspectives

Ahmed A, Kaplan M, Symington A, Kismodi E. Criminalising consensual sexual behaviour in the context of HIV: consequences, evidence, and leadership. *Glob Public Health*. 2011;6 Suppl 3:S357-369.

This paper provides an overview of the use of the criminal law to regulate sexual behaviour in three areas of critical importance: (1) HIV exposure in otherwise consensual sex, (2) sex work and (3) sexual activity largely affecting sexual minorities. It analyses criminal law pertaining to these three distinct areas together, allowing for a more comprehensive and cohesive understanding of criminalisation and its effects. The paper highlights current evidence of how criminalisation undermines HIV prevention and treatment. It focuses on three specific negative effects of criminalisation: (1) enhancing stigma and discrimination, (2) undermining public health intervention through legal marginalisation and (3) placing people in state custody. The paper also highlights gaps in evidence and the need for strong institutional leadership from UN agencies in ending the criminalisation of consensual sexual activity. This paper serves two goals: (1) highlighting the current state of research and emphasising where key institutions have or have not provided appropriate leadership on these issues and (2) establishing a forward-looking agenda that includes a concerted response to the inappropriate use of the criminal law with respect to sexuality as part of the global response to HIV.

Amiya RM, Cope JE, Poudel KC, Jimba M. HIV/AIDS at the intersection of public health and criminal justice. In: Arrigo B, Bersot H, eds. *The Routledge Handbook of International Crime and Justice Studies*. 2013:541-564.

In this chapter, we explore the dynamic role of law as both a means and a potential barrier to implementing successful public health interventions through the lens of the evolving response to HIV/AIDS

across jurisdictions worldwide. Setting forth from a broad overview of the HIV/AIDS epidemic, we first present the history and current landscape regarding criminalization of HIV transmission and exposure. We examine the traditional rationales for invoking criminal law, and whether these afford any justification for HIV-specific statutes. We then discuss the potentially detrimental impacts of HIV-specific criminal statutes on health and human rights fronts and suggest a way forward. The chapter next explores the impacts of statutes criminalizing the behaviors of several categories of marginalized people bearing high burdens of HIV risk – people who use illicit drugs, commercial sex workers, and men who have sex with men (MSM). Finally, we propose some directions for future law, policy, and practice reform toward an evidence-informed, health and human rights-based approach. In this we aim to unify criminal justice and public health systems and resources against HIV as a decidedly harmful element in society. In the end, the way forward will be evident – not to unfairly sanction or disenfranchise key affected populations but to empower them.

Baral SD, Friedman MR, Geibel S, Rebe K, Bozhinov B, Diouf D, Sabin K, Holland CE, Chan R, Caceres CF. Male sex workers: practices, contexts, and vulnerabilities for HIV acquisition and transmission. *Lancet*. 2015;385(9964):260-273. PMC4504188.

Male sex workers who sell or exchange sex for money or goods encompass a very diverse population across and within countries worldwide. Information characterising their practices, contexts where they live, and their needs is limited, because these individuals are generally included as a subset of larger studies focused on gay men and other men who have sex with men (MSM) or even female sex workers. Male sex workers, irrespective of their sexual orientation, mostly offer sex to men and rarely identify as sex workers, using local or international terms instead. Growing evidence indicates a sustained or increasing burden of HIV among some male sex workers within the context of the slowing global HIV pandemic. Several synergistic facilitators could be potentiating HIV acquisition and transmission among male sex workers, including biological, behavioural, and structural determinants. Criminalisation and intersectional stigmas of same-sex practices, commercial sex, and HIV all augment risk for HIV and sexually transmitted infections among male sex workers and reduce the likelihood of these people accessing essential services. These contexts, taken together with complex sexual networks among male sex workers, define this group as a key population underserved by current HIV prevention, treatment, and care services. Dedicated efforts are needed to make those services available for the sake of both public health and human rights. Evidence-based and human rights-affirming services dedicated specifically to male sex workers are needed to improve health outcomes for these men and the people within their sexual networks.

Bolsewicz K, Vallely A, Debattista J, Whittaker A, Fitzgerald L. Factors impacting HIV testing: a review--perspectives from Australia, Canada, and the UK. *AIDS Care*. 2015;27(5):570-580.

With the current global focus on strengthening HIV prevention through greater testing and treatment uptake, it is increasingly salient to identify and address barriers to testing. A review of the published, peer-reviewed literature and national reports from Australia, Canada, and the UK (2003-2013) on barriers to HIV testing was conducted to provide new information relevant to Australia and to complement earlier reviews from Canada and the UK. A systematic database search using keywords and a set of inclusion criteria yielded 36 studies (Australia = 13; Canada = 6; and the UK = 17). In addition 17 unpublished reports were included in the review. Our study uses a novel, comprehensive framework to describe barriers to HIV testing, and thus contributes to moving beyond the traditional patient-provider-system categorization. Within that framework, barriers are categorized as either intrapersonal (reported in 15 studies), interpersonal (21), or extrapersonal (16) and conceptualized within wider sociocultural and structural contexts. People's abilities and motivations to test (intrapersonal factors) are influenced by a host of interconnected factors spanning relationship (interpersonal) and broader socioeconomic, political and cultural (extrapersonal) factors. We suggest that the relative effects of interventions targeting barriers to HIV testing at the intrapersonal and interpersonal levels are limited by the extent to which the social determinants of health are addressed. The framework may also lend itself to thinking about the enabling factors for HIV testing, and future research may investigate the application of that framework for strategizing the most effective response. Future studies should also capture the lived experiences of barriers to HIV testing experienced by patients, especially in populations which are hard to reach based on social and geographic distance. Context-specific studies to evaluate the feasibility and effectiveness of various interventions proposed in the literature to address barriers to HIV testing are needed.

Buchanan KS. When is HIV a crime - sexuality, gender and consent. *Minn. L. Rev.* 2014;99:1231.

HIV criminalization is difficult to justify on the grounds advanced for it: public health and moral retribution. This Article engages with a third, underexamined rationale for HIV criminalization: sexual autonomy. Nondisclosure prosecutions purport to ensure “informed consent” to sex. However, almost all other forms of sexual deception — including deceptions that may jeopardize the partner’s health — are lawful; rape law expressly accommodates an expectation that men may lie to get sex from women. Neither public health nor retributive considerations adequately justifies singling out HIV from other, permitted forms of sexual deception. Moreover, most HIV transmission and nondisclosure takes place between men, but a large majority of prosecutions involve men accused of nondisclosing to women. The arbitrary inclusions and exclusions of HIV criminal laws, their inconsistency with their ostensible rationales, and the striking disparities in HIV prosecutions all tend to raise suspicion that discriminatory impulses may be at work.

Our laws tend to frame HIV as a crime that matters most when it disrupts expectations that non-drug-injecting heterosexuals should be immune to anxiety about HIV. These laws situate HIV as fairly benign when contained within stigmatized populations such as gay men, intravenous drug users, Africans and sex workers. When HIV-positive people transgress these boundaries and cause heterosexual men and women to worry about HIV, though, this transgression is often punished as a crime, even when the behavior poses no transmission risk. HIV laws and their implementation raise concern that discriminatory fallacies about race, gender and sexuality may shape perceptions of whether, when and why HIV is a crime.

Cameron S. Criminal law in clinical settings: Guarding against the big chill. *HIV Australia.* 2016;14(2):45.

It's an uncomfortable space, the murky area where HIV, clinical practice and criminal law intersect. Nowhere is that more evident than in the very guarded acknowledgment in the Seventh National HIV Strategy's guiding principles. Loath to commit, the Strategy states, 'it could be argued that criminalisation perpetuates the isolation and marginalisation of priority populations and limits their ability to seek information, support and health care'. Still, that's an improvement on the previous strategy which barely acknowledged the issue at all. There is enough anecdotal and academically rigorous international research to demonstrate a direct relationship between the criminal justice system and HIV healthcare, with the body of research having grown substantially over the last few years. Recent examples include Lee's US study (application of criminal laws negatively impacts HIV testing rates among those most at risk of infection) and Phillips and Schembri's work in England and Wales (people with HIV could not accurately describe their legal obligations despite having been counselled at the time of diagnosis). In Australia, research on the intersection of criminal law and the HIV healthcare system is more limited. We do know that prosecutions undermine some patients' trust and willingness to speak openly to health care providers. The HIV Futures Seven survey found almost a third (30%) of the 1,000 people with HIV surveyed were worried about disclosing their sexual practices to service providers 'because of the law'. Clinical staff also report avoidance of health services following high profile HIV trials. For example, media coverage of the 2008 prosecution of an ACT HIV-positive sex worker was immediately followed by a startling drop in sexual health testing by sex workers at the ACT Sex Workers Outreach Project, falling from an average of 30 to less than two a fortnight. While more Australian research on the impact of criminal laws on HIV health seeking behaviours would be warmly welcomed, the most immediate gap in our evidence base relates to how (or whether) criminal laws impact the work of Australian healthcare providers. That gap is hardly surprising given healthcare providers are rarely policy analysts or social researchers. Being a doctor or nurse is pretty much a full-time job, with healthcare providers primarily focused on patient care. Our lack of understanding of ways in which criminalisation may shape clinical practice, healthcare services and HIV prevention efforts enacted in the clinic means we are not able to define the problem, let alone design strategies to address it.

Carter A, Greene S, Money D, Sanchez M, Webster K, Nicholson V, Whitbread J, Salters K, Patterson S, Loutfy M, Pick N, Brotto LA, Hankins C, Kaida A. The problematization of sexuality among women living with HIV and a new feminist approach for understanding and enhancing women's sexual lives. *Sex Roles.* 2017:1-22.

In the context of HIV, women's sexual rights and sexual autonomy are important but frequently overlooked and violated. Guided by community voices, feminist theories, and qualitative empirical research, we reviewed two decades of global quantitative research on sexuality among women living with HIV. In the 32

studies we found, conducted in 25 countries and composed mostly of cis-gender heterosexual women, sexuality was narrowly constructed as sexual behaviours involving risk (namely, penetration) and physiological dysfunctions relating to HIV illness, with far less attention given to the fullness of sexual lives in context, including more positive and rewarding experiences such as satisfaction and pleasure. Findings suggest that women experience declines in sexual activity, function, satisfaction, and pleasure following HIV diagnosis, at least for some period. The extent of such declines, however, is varied, with numerous contextual forces shaping women's sexual well-being. Clinical markers of HIV (e.g., viral load, CD4 cell count) poorly predicted sexual outcomes, interrupting widely held assumptions about sexuality for women with HIV. Instead, the effects of HIV-related stigma intersecting with inequities related to trauma, violence, intimate relations, substance use, poverty, aging, and other social and cultural conditions primarily influenced the ways in which women experienced and enacted their sexuality. However, studies framed through a medical lens tended to pathologize outcomes as individual "problems," whereas others driven by a public health agenda remained primarily preoccupied with protecting the public from HIV. In light of these findings, we present a new feminist approach for research, policy, and practice toward understanding and enhancing women's sexual lives—one that affirms sexual diversity; engages deeply with society, politics, and history; and is grounded in women's sexual rights.

Chen AJ. HIV-specific criminal law: A global review. *Intersect: The Stanford Journal of Science, Technology and Society*. 2016;9(3).

Although medical and societal advances have succeeded in greatly reducing the spread of the human immunodeficiency virus (HIV) in the three decades since HIV first confounded and crippled the globe, over two million people worldwide are still newly infected with the virus every year. HIV-specific criminal laws, present and often actively enforced in one-third of United Nations member countries, target people living with HIV (PLWH) for cases of exposure, non-disclosure, and transmission. The criminalization of acts specific to HIV is incompatible with current medical knowledge of HIV transmission, international human rights standards, and public health goals. These HIV-specific criminal laws do not reach the intended objective of reducing unsafe behavior that may spread HIV and in fact hamper HIV prevention efforts, reinforce hard-set societal stigma surrounding HIV and the associated acquired immune deficiency syndrome (AIDS), and perpetuate views of PLWH as dangerous criminals that hold sole responsibility for safeguarding the public from HIV infection. The public health and human rights concerns unveiled by the investigation of HIV-specific criminal laws around the world suggest a new course of action: to set aside attempts to use criminal law to govern the complex and nuanced nature of HIV infection and instead redirect limited resources to the continued expansion of historically successful, evidence-based, and rights-centered public health approaches to HIV prevention and treatment.

Csete J, Dube S. An inappropriate tool: criminal law and HIV in Asia. *AIDS*. 2010;24 Suppl 3:S80-85.

BACKGROUND: Asian countries have applied criminal sanctions widely in areas directly relevant to national HIV programmes and policies, including criminalization of HIV transmission, sex work, homosexuality and drug injection. This criminalization may impede universal access to HIV prevention and treatment services in Asia and undermine vulnerable people's ability to be part of the HIV response. **OBJECTIVE:** To review the status of application of criminal law in key HIV-related areas in Asia and analyze its impact. **METHODS:** Review of literature and application of human rights norms to analysis of criminal law measures. **RESULTS AND CONCLUSION:** Criminal laws in the areas considered here and their enforcement, while intended to reduce HIV transmission, are inappropriate and counterproductive with respect to health and human rights. Governments should remove punitive laws that impede the HIV response and should ensure meaningful participation of people living with HIV, people who use illicit drugs, sex workers and men who have sex with men in combating stigma and discrimination and developing rights-centered approaches to HIV.

Csete J, Pearshouse R, Symington A. Vertical HIV transmission should be excluded from criminal prosecution. *Reprod Health Matters*. 2009;17(34):154-162.

Prevention of mother-to-child transmission of HIV (PMTCT) is an important part of global and national responses to HIV and AIDS. In recent years, many countries have adopted laws to criminalise HIV transmission and exposure. Many of these laws are broadly written and have provisions that enable criminal prosecution of vertical transmission in some circumstances. Even if prosecutions have not yet materialised, the

use of these laws against HIV-positive pregnant women could compound the stigma already faced by them and have a chilling effect on women's utilisation of prevention of mother-to-child transmission programmes. Although criminal laws targeting HIV transmission have often been proposed and adopted with the intent of protecting women, such laws may disadvantage women instead. Criminal laws on HIV transmission and exposure should be reviewed and revised to ensure that vertical transmission is explicitly excluded as an object of criminal prosecution. Scaling up PMTCT services and ensuring that they are affordable, accessible, welcoming and of good quality is the most effective strategy for reducing vertical transmission of HIV and should be the primary strategy in all countries.

Eba PM. Towards smarter HIV laws: considerations for improving HIV-specific legislation in sub-Saharan Africa. *Reprod Health Matters*. 2016;24(47):178-184.

As of 31 July 2014, some 27 countries in sub-Saharan Africa had adopted HIV-specific legislation to respond to the legal challenges posed by the HIV epidemic. However, serious concerns raised about these laws have led to calls for their repeal and review. Through the theory of "smarter legislation", this article develops a framework for analysing the concerns relating to the process, content and implementation of HIV-specific laws. This theoretical framework provides specific guidance and considerations for reforming HIV-specific laws and for ensuring that they achieve their goals of creating enabling legal environments for the HIV response.

Flanigan J. Non-culpable ignorance and HIV criminalisation. *J Med Ethics*. 2014;40(12):798-801.

In this essay, I argue that any legal framework that addresses sexual transmission of HIV should be sensitive to the way that culpability can be mitigated by moral and factual ignorance. Though it is wrong to transmit HIV, public officials should be wary of criminalising transmission because people with HIV may be excused if they suffer from blameless moral or factual ignorance. I begin with the widely shared premise that blameless ignorance about one's HIV status is an excuse for sexual transmission of infections. I then extend this premise to other kinds of non-moral ignorance about HIV. Next, I argue that blameless moral ignorance also excuses transmission of HIV. There is some evidence of significant blameless non-moral and moral ignorance about HIV transmission. In these cases, transmission is excused. In light of the presence of moral and non-moral ignorance about HIV, I conclude that public health officials should encourage moral deliberation about HIV transmission and also that criminal penalties for HIV transmission are unwarranted even in some cases of knowing or intentional transmission.

Forbes A. Sex work, criminalization, and HIV: lessons from advocacy history. *BETA: bulletin of experimental treatments for AIDS: a publication of the San Francisco AIDS Foundation*. 2010;22(4):20.

Sex workers are frequently omitted from discussions about the links between criminalization, marginalization, and increased HIV transmission. At the IAS 2010 conference in Vienna, substantial attention was focused on the negative impacts that criminalization has on men who have sex with men, injection drug users, and people living with HIV—but very little on its effects on sex workers. Few outside of the Global Village explicitly called for decriminalization of sex work or mentioned that laws criminalizing HIV transmission and exposure exacerbate the damage already being done to sex workers' health and rights. This article explores this omission, how other hard-hit constituencies have struggled for their place on the HIV/AIDS advocacy agenda, and why the HIV/AIDS field should be actively collaborating with sex workers' rights organizations, particularly on anti-criminalization work.

Francis JG, Francis LP. HIV treatment as prevention: not an argument for continuing criminalisation of HIV transmission. *International Journal of Law in Context*. 2013;9(4):520-534.

HIV prevention and treatment are undergoing impressive technological and practice changes. In-home rapid testing, prophylaxis before risky sex, and treatment as prevention give cause for remarkable optimism and suggest the possibility of an AIDS-free generation. These changes in HIV prevention and treatment might affect HIV policy in several different directions. One direction would be further entrenchment of the currently prevailing punitive approach. A different direction would be a shift away from use of the criminal law as a method for discouraging risky behaviour and towards a strategy aimed to encourage the use of the new treatment and prevention possibilities. When such abrupt technological changes are accompanied by sharp changes in regulatory regimes, they are identified in the public policy literature as a 'punctuated equilibrium'. A

shift away from criminalisation in HIV policy, if sufficiently widespread and transformative, could reach the level of a punctuated equilibrium. This paper presents a critical assessment of the implications of the changes in available forms of treatment and prevention for the continued appeal of criminalisation as an approach to HIV policy. We conclude that criminalisation is less justifiable in the light of what might be circumstances ripe for a punctuated equilibrium.

Gurnham D. Criminalising contagion: ethical, legal and clinical challenges of prosecuting the spread of disease and sexually transmitted infections. *Sex Transm Infect.* 2013;89(4):274-275.

It gives me great pleasure to introduce this special collection of papers on the theme of the criminalisation of infection and disease. The four articles selected here for Sexually Transmitted Infections, which I have had the privilege of editing in collaboration with Professor Jackie Cassell, form part of a larger response across three BMJ Group journals involving also the Journal of Medical Ethics and Medical Humanities, in which similar themed sections will appear in December. The collection represents part of a wider project that brings together healthcare professionals and academic scholars in the fields of public health, medical law and ethics, criminal law and criminal justice, for a series of seminars currently ongoing and funded by the Economic and Social Research Council, in which readers of this journal are invited to participate. Something that the articles collected here may be taken to suggest is that, while the criminalisation of STIs is becoming increasingly accepted on the level of national policy, it is viewed by many critical commentators with concern if not outright rejection. Why is this? Arguably what makes the criminalisation of STIs politically attractive to governments, in the context of HIV/AIDS at least, is that there remains some considerable ignorance about transmissibility and treatability. Questions as to just how risky it is to be exposed to STIs, and who should bear responsibility, must be crucial to the larger issue of whether and how to criminalise exposure and/or transmission. Indeed, criminal justice traditionally relies on notions of individual responsibility, retrospective allocation of blame, imposition of stigma for the violation of societal norms and the separation (conceptually and physically) of the innocent 'many' from the guilty 'few'.

Haire B, Kaldor J. HIV transmission law in the age of treatment-as-prevention. *Journal of medical ethics.* 2015;41(12):982-986.

Evidence that treating people with HIV early in infection prevents transmission to sexual partners has reframed HIV prevention paradigms. The resulting emphasis on HIV testing as part of prevention strategies has rekindled the debate as to whether laws that criminalise HIV transmission are counterproductive to the human rights-based public health response. It also raises normative questions about what constitutes 'safe(r) sex' if a person with HIV has undetectable viral load, which has significant implications for sexual practice and health promotion. This paper discusses a recent high-profile Australian case where HIV transmission or exposure has been prosecuted, and considers how the interpretation of law in these instances impacts on HIV prevention paradigms. In addition, we consider the implications of an evolving medical understanding of HIV transmission, and particularly the ability to determine infectiousness through viral load tests, for laws that relate to HIV exposure (as distinct from transmission) offences. We conclude that defensible laws must relate to appreciable risk. Given the evidence that the transmissibility of HIV is reduced to negligible level where viral load is suppressed, this needs to be recognised in the framing, implementation and enforcement of the law. In addition, normative concepts of 'safe(r) sex' need to be expanded to include sex that is 'protected' by means of the positive person being virally suppressed. In jurisdictions where use of a condom has previously mitigated the duty of the person with HIV to disclose to a partner, this might logically also apply to sex that is 'protected' by undetectable viral load.

Hughes D. Did the Individual Consent to the Risk of Harm? A Comparative Jurisdictional Analysis of Consent in Cases of Sexual Transmission/Exposure to HIV. *The Journal of Criminal Law.* 2018;82(1):76-105.

This article considers the necessary ingredients for an individual to consent to running the risk of the HIV virus being transmitted through high-risk unprotected sexual intercourse. In order to achieve this aim, an assessment of what should equate to a fully informed consent is evaluated. The article will provide a comparative jurisdictional analysis of the consent requirement in three particularised jurisdictions: England, Canada and the USA. A comparison of relational judicial precepts will follow the discussion of extant law in each country. It will be established that few jurisdictions fully consider the requirements of a fully informed

consent. The final part of the article will suggest a bespoke new legislative framework that will account for the circumstances that are necessary for an individual to provide a fully informed consent to the risk of acquiring the virus.

Klein A. Criminal law, public health, and governance of HIV exposure and transmission. *The International Journal of Human Rights*. 2009;13(2-3):251-278.

This paper argues that the principal human rights and policy concerns that have been raised over criminalisation of HIV exposure or transmission since the early days of the epidemic cannot be neatly addressed within the traditional criminal law framework. Public health structures may be better placed, in terms of both their mandate and their structure, to incorporate lessons from the public health and human rights movement. This paper critically explores the potential of emerging models of structured coordination between public health and criminal law actors with a view to a more targeted, human-rights-sensitive application of criminal law to the sexual behaviours of people living with HIV. Finally, it assesses these emerging approaches from new governance and restorative justice perspectives.

McClelland A. *Research at the medico-legal borderland: perspectives on HIV and criminal law*. *Somatosphere*; 2013. Available at: <http://somatosphere.net/2013/10/research-at-the-medico-legal-borderland.html>.

In recent years, the criminalization of HIV transmission, exposure and non-disclosure has become a hot topic among those working within the global AIDS milieu. Social scientists have become increasingly attentive to the complex and varied consequences and impacts of HIV criminalization. Not surprisingly, at this year's Association of the Social Science and Humanities on HIV (ASSHH) Conference there was a wide variety of innovative work on the issue. A majority of the research was presented from social scientists working in the two countries with some of the greatest number of per-capita criminal charges and prosecutions related to HIV non-disclosure and exposure: the United States and Canada. The conference held two formal sessions highlighting new work in this area entitled: Viral Politics: HIV Criminalization & Social Inquiry and Social Science, Criminal Law and HIV Transmissions Risks: Novel Research Perspectives. In this article I summarize highlights and key findings from these presentations, and examine some of the methodological approaches and theories employed by social scientists working on the 'medico-legal borderland'. I also provide a brief critical analysis in order to pose questions for future potential inquiry.

McQuoid-Mason D. Do doctors attending sexual-offence victims have to notify sexual-offence suspects that their patients who were forced to have unprotected sexual intercourse are HIV-positive? What should doctors do? *South African Journal of Bioethics and Law*. 2017;10(2):67-69.

The question has been asked as to whether doctors attending sexual-offence victims have to notify sexual-offence suspects that their patients who were forced to have unprotected sexual intercourse are HIV-positive. It is submitted that the common law requires doctors to warn endangered third parties where such persons may suffer injury as a result of interactions with their patients, and that this applies to patients who have tested positive for HIV. The ethical rules of the Health Professions Council of South Africa also require doctors to breach the confidentiality rule against the consent of their patients who have tested HIV-positive, where the sexual partner of a patient is known, and after counselling such patients still refuse to allow disclosure – provided there is no risk of consequential harm to such patients. The dilemma of doctors treating HIV-positive patients is sometimes resolved where, in terms of the Criminal Law (Sexual Offences and Related Matters) Amendment Act No. 32 of 2007, a court order for the compulsory testing of the suspect has been obtained and the suspect knows his or her HIV status. Recommendations are made for what doctors should do in such cases.

Mykhalovskiy E. The public health implications of HIV criminalization: past, current, and future research directions. *Critical Public Health*. 2015;25(4):373-385.

While public health remains the primary site of authority for preventing HIV transmission, recent shifts in the biopolitics of HIV have heightened tensions in the institutional and discursive relations through which the sexual lives of people living with HIV and broader HIV epidemics are regulated. Most notably, over the past decade, criminal justice responses to HIV have gained considerable traction. The growing use of the criminal law to regulate perceived HIV transmission risks has occasioned considerable controversy among people living

with HIV, community-based AIDS organizations, health-care providers, public health authorities, prosecutors, judges, and the legal community. This article introduces a special section of Critical Public Health focused on the public health implications of HIV criminalization. The article reviews past and current work on the topic, situates the contributions made by the articles published in the special section, and outlines directions for future inquiry.

Mykhalovskiy E, Betteridge JG, Sanders C, Jones M. *The public health implications of criminalizing HIV non-disclosure, exposure and transmission: Report of an international workshop*. 2014. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2374933.

The key goals of the workshop were to enhance the quality of research, document and explore solutions to key methodological, theoretical and knowledge translation challenges facing the field, establish new research priorities and identify opportunities for novel research collaboration. The workshop sought to meet these goals through face-to-face dialogue and the exchange and critique of work-in-progress papers written by leading researchers from the social sciences, law and public health. Workshop participants came from Canada, the United States (US) and England and included people living with HIV/AIDS, university researchers, public health professionals, doctoral and post-doctoral students, lawyers, advocates, activists, people who work in community-based AIDS and other service organizations and consultants.

Obermeyer CM, Baijal P, Pegurri E. *Facilitating HIV disclosure across diverse settings: a review*. *Am J Public Health*. 2011;101(6):1011-1023. PMC3093267.

HIV status disclosure is central to debates about HIV because of its potential for HIV prevention and its links to privacy and confidentiality as human-rights issues. Our review of the HIV-disclosure literature found that few people keep their status completely secret; disclosure tends to be iterative and to be higher in high-income countries; gender shapes disclosure motivations and reactions; involuntary disclosure and low levels of partner disclosure highlight the difficulties faced by health workers; the meaning and process of disclosure differ across settings; stigmatization increases fears of disclosure; and the ethical dilemmas resulting from competing values concerning confidentiality influence the extent to which disclosure can be facilitated. Our results suggest that structural changes, including making more services available, could facilitate HIV disclosure as much as individual approaches and counseling do.

Open Society Institute. *Laws and policies affecting sex work: a reference brief*. New York, NY: Open Society Foundations; 2012. Available at: <https://www.opensocietyfoundations.org/sites/default/files/sex-work-laws-policies-20120713.pdf>.

This reference brief aims to clarify terms and illustrate examples of alternatives to the use of criminal law as a response to sex work. Understanding the range of legislative and policy options for responding to sex work is critical to establishing policies consistent with respecting, protecting, and fulfilling the human rights of sex workers. Laws and policies on sex work should be based on the best available evidence about what works to protect health and rights. They should optimize sex workers' ability to realize the right to due process under the law, the right to privacy, the right to form associations, the right to be free of discrimination, abuse, and violence, and the right to work and to just and favorable conditions of work. Sex workers should have a meaningful role in the design, implementation, and monitoring of the laws and policies that affect them.

Phillips M, Sukthakar A. *Imprisonment for non-intentional transmission of HIV: can it be supported using established principles for justifying criminal sentencing?* *Sex Transm Infect*. 2013;89(4):276-279.

In England, Wales and Scotland, those who unintentionally transmit HIV through sexual intercourse are at risk of criminal prosecution, and furthermore may be at risk of imprisonment under the Offences Against the Person Act 1861. These sentences have ranged between 1 and 10 years. There has been a long debate on whether this is an acceptable use of the law, and indeed whether those who transmit HIV in this manner should be subjected to legal proceedings. Previous debate has embraced the rhetoric of shared responsibility and public health. In this paper, we wished instead to apply traditional justifications for sentencing (including retribution, deterrence, rehabilitation, incapacitation and reparation) to imprisonment for non-intentional transmission of HIV through consensual sexual intercourse. We argue that when these principles are applied to imprisonment for this 'crime', we are unable to justify imprisonment sufficiently, and therefore, that imprisonment is a misguided response to HIV transmission.

Saigal P, Weait M, Poulton M. Criminalisation of HIV transmission: an overview for clinicians. *Sex Transm Infect.* 2018.

The law surrounding criminal liability for HIV transmission is complex, but informing patients of potential culpability is arguably part of our professional duty. The purpose of this summary is to simplify and guide clinicians by explaining the legal basis for criminalising HIV transmission, defining reckless transmission and discussing how disclosure, condoms and treatment as prevention (TasP) may impact criminal liability. Lastly, it discusses how this information can easily be conveyed to patients.

Stanton C, Quirk H. *Criminalising contagion: Legal and ethical challenges of disease transmission and the criminal law.* Cambridge, England: Cambridge University Press; 2016.

The use of the criminal law to punish those who transmit disease is a topical and controversial issue. To date, the law (and the related academic literature) has largely focused on HIV transmission. With contributions from leading practitioners and international scholars from a variety of disciplines, this volume explores the broader question of if and when it is appropriate to criminalise the transmission of contagion. The scope and application of the laws in jurisdictions such as Canada, the United Kingdom and Norway are considered, historical comparisons are examined, and options for the further development of the law are proposed.

Weait M. *Intimacy and responsibility: the criminalisation of HIV transmission.* London, England: Routledge-Cavendish; 2007.

In what circumstances and on what basis, should those who transmit serious diseases to their sexual partners be criminalised? In this new book Matthew Weait uses English case law as the basis of a more general and critical analysis of the response of the criminal courts to those who have been convicted of transmitting HIV during sex. Examining cases and engaging with the socio-cultural dimensions of HIV/AIDS and sexuality, he provides readers with an important insight into the way in which the criminal courts construct the concepts of harm, risk, causation, blame and responsibility. Taking into account the socio-cultural issues surrounding HIV/AIDS and their interaction with the law, Weait has written an excellent book for postgraduate and undergraduate law and criminology students studying criminal law theory, the trial process, offences against the person, and the politics of criminalisation. The book will also be of interest to health professionals working in the field of HIV/AIDS genito-urinary medicine who want to understand the issues that may face their clients and patients.

GUIDANCE, FACT SHEETS, AND TALKING POINTS

United States

Center for HIV Law and Policy. *Guidance for people living with HIV who are at risk of, or are facing, criminal prosecution for HIV nondisclosure or exposure [Fact Sheet].* New York, NY: Center for HIV Law and Policy; 2012. Available at:

http://www.hivlawandpolicy.org/sites/default/files/Crim%20Checklist%20for%20PLWHA_122012.pdf.

This fact sheet gives basic but essential guidance on what to do when the risk of criminal prosecution for HIV nondisclosure or exposure may be a reality. Thirty-four states and territories have laws that criminalize HIV exposure and/or nondisclosure of HIV status during sex or other contact with "body fluids" (saliva, blood), so it's important that people living with HIV have essential information about how they can avoid or prepare for possible criminal prosecution. The fact sheet outlines basic "dos" and "don'ts" and includes a list of legal resources.

Center for HIV Law and Policy. *H.R. 1843/S.1790, REPEAL HIV Discrimination Act outreach toolkit [Toolkit].* New York, NY: Center for HIV Law and Policy; 2013. Available at:

http://www.hivlawandpolicy.org/sites/default/files/H.R.%201843%20Outreach%20Toolkit_0.pdf.

H.R. 1843, the Repeal Existing Policies that Encourage and Allow Legal (REPEAL) HIV Discrimination Act, was introduced on May 7, 2013 by U.S. Congresswoman Barbara Lee (D-Calif.) and Congresswoman Ileana Ros-Lehtinen (R-Fla.). S.1790 was introduced on December 10, 2013 by U.S. Senator Chris Coons (D-Del.). The bill addresses the serious problem of discrimination in the use of criminal and civil commitment laws against those who test positive for HIV, and provides incentives for states to explore repeal or reform of laws

and practices. This Toolkit provides advocates with resources that can be used in outreach efforts to your members of Congress. Advocates can use this toolkit as a guide for letter writing campaigns, calling your representative's state and Washington D.C. offices, or meeting with your representative or the representative's legislative staff.

Center for HIV Law and Policy. *HIV criminalization talking points and references, FAQs, and helpful resources (updated August 2017)* [Fact Sheet]. New York, NY: Center for HIV Law and Policy; 2013.

Available at:

<http://www.hivlawandpolicy.org/sites/default/files/HIV%20CRIMINALIZATION%20TALKING%20POINTS%20AND%20REFERENCES%20FAQs%20%26%20HELPFUL%20RESOURCES%20-%20Community%20Advocate%20Toolkit%20%28Updated%20August%202017%29.pdf>.

HIV Criminalization Talking Points and References, FAQs, and Helpful Resources is excerpted from Center for HIV Law and Policy (CHLP)'s Community Advocate Toolkit, a go-to resource for community advocates working on state-level HIV criminalization modernization efforts. This quick-reference resource includes HIV criminalization talking points and references, links to longer reference materials, and links to HIV criminalization resources by issue/subject.

Center for HIV Law and Policy. *Routes, risks and realities of HIV transmission and care: current scientific knowledge and medical treatment* [Fact Sheet]. New York, NY: Center for HIV Law and Policy; 2017. Available at: <http://www.hivlawandpolicy.org/sites/default/files/Routes%20Risks%20Realities.pdf>.

Almost every type of HIV-related discrimination and associated stigma — from denials of medical treatment or admission to schools and camps to unwarranted felony prosecutions for HIV “exposure” — is rooted in gross misperceptions about the actual routes, risks and current realities of HIV transmission and treatment. Extraordinary progress in treatment options has transformed what it means to live with HIV, yet public understanding of HIV seems largely stuck in the 1980’s, before HIV was a treatable, chronic disease. This fact sheet was created as part of a larger effort to replace that ignorance with information about what is currently well-known about how HIV is and is not transmitted, and how modern HIV care has transformed the health and longevity of people living with HIV while reducing transmission to others. The information it contains is excerpted in part from “HIV Medicine and Science: Transmission Considerations,” a slide presentation by Dr. David Wohl, Associate Professor/Site Leader at Univ. North Carolina AIDS Clinical Trials Unit at Chapel Hill, Director of the North Carolina AIDS Education and Training Center, and Co-Director of HIV Services for the N.C. Department of Public Safety. Dr. Wendy Armstrong, Associate Professor of Medicine at Emory Univ. School of Medicine, and Medical Director, Ponce de Leon Clinic/Grady Health System, and Dr. Joseph Sonnabend, one of the earliest researchers and most respected clinicians in the field of HIV, provided invaluable review and input. We hope it will be useful for people with HIV and their advocates as well as policy makers and the press.

Center for HIV Law and Policy. *Map: HIV criminalization in the United States*. New York, NY: Center for HIV Law and Policy; 2018. Available at:

<http://www.hivlawandpolicy.org/sites/default/files/CHLP%20HIV%20Crim%20Map%20061418.pdf>.

This United States map identifies states (1) with HIV-specific criminal laws; (2) with general felony laws that have been used to prosecute people living with HIV; (3) with communicable disease laws that may include HIV; and (4) that require registration as a sex offender as part of the punishment under HIV-specific laws. It also highlights that there have been more than 303 people living with HIV who have been arrested or charged under these laws since 2008.

Center for HIV Law and Policy and National LGBTQ Task Force. The intersection of sex work and HIV criminalization: an advocate's toolkit. New York, NY/Washington, DC: Center for HIV Law and Policy and National LGBTQ Task Force; 2017. Available at:

http://www.hivlawandpolicy.org/sites/default/files/Sex%20Work%20HIV%20Toolkit%20FINAL%20R2_0.pdf.

Center for HIV Law and Policy and National LGBTQ Task Force. The intersection of syringe use and HIV criminalization: an advocate's toolkit. New York, NY/Washington, DC: Center for HIV Law and Policy and National LGBTQ Task Force; 2017. Available at:

http://www.hivlawandpolicy.org/sites/default/files/Syringe%20Use%20Toolkit%20Final%20R2_0.pdf.

The Center for HIV Law and Policy (CHLP) and the National LGBTQ Task Force are pleased to announce the release of an exciting new resource that can help foster more intersectional advocacy for HIV criminal law reform. HIV Criminalization Beyond Non-Disclosure: Advocacy Toolkits on Intersections with Sex Work and Syringe Use is the sum of two toolkits designed for advocates who care about ending the disproportionate criminalization of people living with HIV. The toolkits highlight the intersections between advocacy for HIV criminal law reform, decriminalization of sex work, and safe syringe access. These different advocacy communities share many common goals and constituencies, yet do not generally work in close collaboration or collectively strategize. The toolkits underscore the ways in which certain HIV criminal laws specifically target sex workers and people who inject substances, but also how these laws and those that prohibit sex work and drug use represent the systemic criminalization of safety and survival of Black and Brown bodies and of sexual and gender minorities. The toolkits discuss the many ways in which these issues are connected and outline concrete steps advocates can take to strengthen their intersectional advocacy. They were developed in consultation with a broad range of stakeholders and organizations. In producing the toolkits, CHLP and the National LGBTQ Task Force reaffirm their commitment to advancing progressive policy and grassroots movement rooted in bodily autonomy, self-determination, and racial and economic justice.

Lambda Legal. 15 ways HIV criminalization laws harm us all [Fact Sheet]. New York, NY: Lambda Legal; 2013. Available at: <https://www.lambdalegal.org/sites/default/files/publications/downloads/15-ways-hiv-criminalization-laws-harm-us-all.pdf>.

Lambda Legal is working to repeal or reform HIV criminalization laws throughout the United States. An HIV criminalization law is one that specifically targets and punishes people living with HIV for engaging in conduct that would otherwise be legal if not for the person's HIV status. Most of these laws do not require transmission of HIV and are based on the mere failure to announce one's medical condition to a potential partner prior to engaging in sexual contact. Below we describe 15 ways these laws harm public health, result in unjust prosecutions, and serve primarily to stigmatize and oppress people living with HIV.

National Alliance of State and Territorial AIDS Directors. HIV criminalization health department talking points and FAQs [Fact Sheet]. Washington, DC: National Alliance of State and Territorial AIDS Directors; 2011. Available at: <https://www.nastad.org/sites/default/files/HIV-Decriminalization-Health-Department-Talking-Points-and-FAQs.pdf>.

The National Alliance of State & Territorial AIDS Directors (NASTAD) is concerned with a number of recent attempts to revise HIV criminalization laws in the United States. Many of these efforts run contrary to the goals articulated in NASTAD's February 2011 National HIV/AIDS Strategy Imperative: Fighting Stigma and Discrimination by Repealing HIV-specific Criminal Statutes (HIV Decriminalization Policy Statement). As a result, NASTAD has developed key points to assist health departments respond to frequently asked questions and guide discussions around any reform efforts that are consistent with the Decriminalization Policy Statement. NASTAD strongly opposes laws that create HIV-specific crimes or increased penalties for persons who are HIV positive and convicted of criminal offenses.

Positive Justice Project. HIV criminalization fact sheet (updated November 2012) [Fact Sheet]. New York, NY: Center for HIV Law and Policy; 2010. Available at: http://www.hivlawandpolicy.org/sites/default/files/PJP%20fact%20sheet_11.14.2012.pdf.

The Positive Justice Project's HIV Criminalization Fact Sheet provides a quick summary of the facts and issues surrounding HIV criminalization in the United States. Currently there are 32 states and 2 U.S. territories that explicitly criminalize HIV exposure through sex, shared needles, and, in some jurisdictions, through "bodily fluids", including saliva. In these cases, neither proof of the intent to transmit HIV nor actual

transmission is required. Sentences for HIV-positive persons convicted of HIV exposure are typically very harsh and disproportionate to the actual or potential harm presented in the facts of the case, perpetuating the stigma that HIV-positive people are toxic and dangerous. Studies show that these HIV-specific statutes and prosecutions have absolutely no effect on behavior, and in fact undermine public health goals. The goal of the Positive Justice Project is to repeal these HIV criminalization statutes and end HIV-specific prosecutions, increased punishment, and government-sponsored discrimination against people with HIV in the criminal justice system.

Positive Justice Project. *Why are we putting people in jail for having HIV? A grassroots guide to HIV criminalization: facts, foolishness, and solutions* [Fact Sheet]. New York, NY: Center for HIV Law and Policy in collaboration with the National Center for Lesbian Rights; 2015. Available at: <http://www.hivlawandpolicy.org/sites/default/files/Grassroots%20Guide%20to%20HIV%20Criminalization.pdf>.

The Time to Act is Now. That was the U.S. government's theme for World AIDS Day 2015. In that spirit, The Center for HIV Law & Policy (CHLP), in collaboration with the National Center for Lesbian Rights (NCLR), has released this Grassroots Guide to HIV Criminalization: Facts, Foolishness, and Solutions. HIV disproportionately affects people of color, men who have sex with men, transgender women, and those without access to quality health care. Even worse, many states still criminalize HIV. This guide explains the simple medical facts of HIV transmission and care, addresses the legal foolishness that discriminates against and imprisons people living with HIV, and gives solutions for anyone willing to act now to decriminalize HIV.

Positive Women's Network. *Criminalization of HIV exposure and transmission* [Fact Sheet]. Oakland, CA: Positive Women's Network; 2013. Available at: <https://pwnusa.files.wordpress.com/2013/02/criminalization-factsheet.pdf>.

This fact sheet was developed and published by the Positive Women's Network-USA. This resource includes brief information about the laws, reasons why HIV exposure and transmission laws are a problem, quotes from HIV-positive women who participated in the PWN Human Rights Survey regarding the laws, and links to additional resources on HIV criminalization.

Global Perspectives

Bernard EJ, Cameron S. *Advancing HIV justice: A progress report on achievements and challenges in global advocacy against HIV criminalisation*. Amsterdam/London: Global Network of People Living with HIV (GNP+) and HIV Justice Network; 2013. Available at: <http://www.hivjustice.net/wp-content/uploads/2013/05/Advancing-HIV-Justice-June-2013.pdf>.

The aim of Advancing HIV Justice is to provide a progress report of achievements and challenges in global advocacy against HIV criminalisation during the 18 month period, September 2011 to March 2013. Prior to September 2011, reports were produced for the Global Commission on HIV and the Law, and for UNAIDS, that summarised developments in this area. Prior to these comprehensive reports, the 2010 Global Criminalisation Scan report had previously provided an overview of laws, prosecutions and advocacy. However, Advancing HIV Justice is the first report to focus primarily on advocacy. We hope it will be useful for individuals and organisations working to end or mitigate the harm of HIV criminalisation around the world, as well for others with an interest in HIV and human rights issues. Given the lack or inadequacy of systems to track HIV-related (or other) prosecutions in most places, it is not possible to determine the actual number of arrests and prosecutions for every country in the world. Much of what is known about individual cases comes from media reports, and obtaining accurate information can be challenging – even more so in countries where such information is not freely available. Reported cases, through court reporting or the media, therefore, should be seen as illustrations of what may be a more widespread, but generally undocumented, use of criminal law against people with HIV. This report was created through a collaborative effort between the Global Network of People living with HIV (GNP+) and the HIV Justice Network that included:

1. A desk review of online materials relating to HIV criminalisation advocacy (including, but not limited to, the HIV Justice Network website, Facebook group and Twitter account; the Global Criminalisation Scan website; the Global Commission on HIV and the Law website; International Planned Parenthood Federation (IPPF)'s 'Criminalize Hate, Not HIV' website'; and the AIDS 2012 programme).
2. Contacting individuals and organisations in countries where advocacy had taken place but where details were unclear for further information.

3. An internal and external review process that included organisations working in this area (IPPF, Sero Project and UNAIDS).

Bernard EJ, Cameron S. *Advancing HIV justice 2: Building momentum in global advocacy against HIV criminalisation*. Brighton/Amsterdam: HIV Justice Network and Global Network of People Living with HIV; 2016. Available at: http://www.hivjustice.net/wp-content/uploads/2016/05/AHJ2.final2_10May2016.pdf.

The aim of Advancing HIV Justice 2 is to provide a progress report of achievements and challenges in global advocacy against HIV criminalisation. We hope it will be useful for individuals and organisations working to end or mitigate the harm of HIV criminalisation around the world, as well as for others with an interest in HIV and human rights issues. The report was created through a collaborative effort between the HIV Justice Network and the Global Network of People living with HIV (GNP+) that included:

1. A desk review of materials relating to HIV criminalisation laws, cases, social science and advocacy (including, but not limited to, the HIV Justice Network website, Facebook group and Twitter account; the GNP+ Global Criminalisation Scan website; the Global Commission on HIV and the Law website; PubMed; and AIDS 2014 programme.)
2. Systematically contacting individuals and organisations engaging with the HIV Justice Network and GNP+ for further information in countries where laws, cases and/or advocacy had taken place but where details were unclear.
3. An internal and external review process that included key organisations working in this area including the Canadian HIV/AIDS Legal Network, Sero Project, UNAIDS and UNDP.
4. A number of drafts that were initially co-written by Edwin Bernard and Sally Cameron, with the final version overseen and finalised by Edwin Bernard.

Global Commission on HIV and the Law. *HIV and the law: Risks, rights & health*. New York, NY: United Nations Development Programme; 2012. Available at: <https://hivlawcommission.org/wp-content/uploads/2017/06/FinalReport-RisksRightsHealth-EN.pdf>.

“HIV and the Law: Risks, Rights & Health” is the Commission’s flagship publication. Released in July 2012, the report presents public health, human rights and legal analysis and makes recommendations for law and policy makers, civil society, development partners and private sector actors involved in crafting a sustainable global response to HIV.

HIV Justice Worldwide. *HIV Justice Toolkit*. 2017; <http://toolkit.hivjusticeworldwide.org/>.

The HIV Justice Toolkit aims to support advocates to oppose HIV criminalisation at all levels – from educating communities and lawmakers to defending individual cases. It includes all kinds of resources from all over the world that we hope will be useful depending on your advocacy targets (such as lawmakers; prosecutors and judges; police; and the media).

Joint United Nations Programme on HIV/AIDS. *Ending overly broad criminalisation of HIV non-disclosure, exposure and transmission: critical scientific, medical and legal considerations*. Geneva, Switzerland: Joint United Nations Programme on HIV/AIDS; 2013. Available at:

http://www.unaids.org/sites/default/files/media_asset/20130530_Guidance_Ending_Criminalisation_0.pdf.

Note: In 2008, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the United Nations Development Programme (UNDP) jointly issued a policy brief responding to the broad use of criminal law in instances of HIV non-disclosure, exposure, and transmission. In the current document, UNAIDS restates its endorsement of limiting prosecutions to only cases of intentional transmission (i.e., where an individual knows his or her HIV-positive status, acts with the intention to transmit HIV, and actually transmits HIV). UNAIDS is concerned with the continued use of criminal law beyond these limits, such as cases of unintended transmission, non-disclosure, or exposure to HIV without transmission. The guidance includes considerations and recommendations on addressing these concerns for governments, legal authorities, civil society including people living with HIV, and international partners/donors, using current scientific and medical evidence, legal principles, and judicial fairness, and protecting human rights of individuals involved in criminal law cases. The considerations critical for assessment include: the level of harm caused by HIV, the risk of HIV transmission related to a particular act informed by scientific and medical evidence, the mental culpability of the person accused, the defenses to charges or conviction, the limitations and elements of proof of the offences, the

determination of penalties following conviction, and the development and implementation of prosecutorial guidelines.

UNAIDS. *Policy brief: Criminalization of HIV transmission*. Geneva, Switzerland: UNAIDS; 2008.

Available at:

http://www.unaids.org/sites/default/files/media_asset/jc1601_policy_brief_criminalization_long_en.pdf.

UNDP and UNAIDS have developed a policy brief on criminalization of HIV Transmission. The policy brief urges governments to limit criminalization of HIV to cases of intentional transmission. It advocates for non-application of criminal law to cases where there is no significant risk of transmission. It further explains cases where criminal law should not be applied.

UNAIDS. *The Gap Report*. Geneva, Switzerland: UNAIDS; 2014. Available at:

http://www.unaids.org/sites/default/files/media_asset/UNAIDS_Gap_report_en.pdf.

How do we close the gap between the people moving forward and the people being left behind? This was the question we set out to answer in the UNAIDS Gap report. Similar to the Global report, the goal of the Gap report is to provide the best possible data, but, in addition, to give information and analysis on the people being left behind.

Note: The report highlights key reasons that limit access to HIV services including stigma, discrimination, criminal laws and other human rights violations against people living with HIV. Pages of interest related to criminalization: 123-127.

POLICY AND CONSENSUS STATEMENTS

Barré-Sinoussi F, Abdool Karim SS, Albert J, Bekker L-G, Beyrer C, Cahn P, Calmy A, Grinsztejn B, Grulich A, Kamarulzaman A, Kumarasamy N, Loutfy MR, El Filali KM, Mboup S, Montaner JSG, Munderi P, Pokrovsky V, Vandamme A-M, Young B, Godfrey-Faussett P. Expert consensus statement on the science of HIV in the context of criminal law. *Journal of the International AIDS Society*. 2018;21(7):e25161.

Introduction: Globally, prosecutions for non-disclosure, exposure or transmission of HIV frequently relate to sexual activity, biting, or spitting. This includes instances in which no harm was intended, HIV transmission did not occur, and HIV transmission was extremely unlikely or not possible. This suggests prosecutions are not always guided by the best available scientific and medical evidence. Discussion: Twenty scientists from regions across the world developed this Expert Consensus Statement to address the use of HIV science by the criminal justice system. A detailed analysis of the best available scientific and medical research data on HIV transmission, treatment effectiveness and forensic phylogenetic evidence was performed and described so it may be better understood in criminal law contexts. Description of the possibility of HIV transmission was limited to acts most often at issue in criminal cases. The possibility of HIV transmission during a single, specific act was positioned along a continuum of risk, noting that the possibility of HIV transmission varies according to a range of intersecting factors including viral load, condom use, and other risk reduction practices. Current evidence suggests the possibility of HIV transmission during a single episode of sex, biting or spitting ranges from no possibility to low possibility. Further research considered the positive health impact of modern antiretroviral therapies that have improved the life expectancy of most people living with HIV to a point similar to their HIV-negative counterparts, transforming HIV infection into a chronic, manageable health condition. Lastly, consideration of the use of scientific evidence in court found that phylogenetic analysis alone cannot prove beyond reasonable doubt that one person infected another although it can be used to exonerate a defendant. Conclusions: The application of up-to-date scientific evidence in criminal cases has the potential to limit unjust prosecutions and convictions. The authors recommend that caution be exercised when considering prosecution, and encourage governments and those working in legal and judicial systems to pay close attention to the significant advances in HIV science that have occurred over the last three decades to ensure current scientific knowledge informs application of the law in cases related to HIV.

Boyd M, Cooper D, Crock EA, Crooks L, Giles ML, Grulich A, Lewin SR, Nolan D, Yarwood T. Sexual transmission of HIV and the law: an Australian medical consensus statement. *Med J Aust.* 2016;205(9):409-412.

INTRODUCTION: Criminal cases involving human immunodeficiency virus transmission or exposure require that courts correctly comprehend the rapidly evolving science of HIV transmission and the impact of an HIV diagnosis. This consensus statement, written by leading HIV clinicians and scientists, provides current scientific evidence to facilitate just outcomes in Australian criminal cases involving HIV. Main recommendations: Caution should be exercised when considering charges or prosecutions regarding HIV transmission or exposure because: Scientific evidence shows that the risk of HIV transmission during sex between partners of different HIV serostatus can be low, negligible or too low to quantify, even when the HIV-positive partner is not taking effective antiretroviral therapy, depending on the nature of the sexual act, the viral load of the partner with HIV, and whether a condom or pre-exposure prophylaxis is employed to reduce risk. The use of phylogenetic analysis in cases of suspected HIV transmission requires careful consideration of its limited probative value as evidence of causation of HIV infection, although such an approach may provide valuable information, particularly in relation to excluding HIV transmission between individuals. Most people recently infected with HIV are able to commence simple treatment providing them a normal and healthy life expectancy, largely comparable with their HIV-negative peers. Among people who have been diagnosed and are receiving treatment, HIV is rarely life threatening. People with HIV can conceive children with negligible risk to their partner and low risk to their child. Changes in management as result of the consensus statement: Given the limited risk of HIV transmission per sexual act and the limited long term harms experienced by most people recently diagnosed with HIV, appropriate care should be taken before HIV prosecutions are pursued. Careful attention should be paid to the best scientific evidence on HIV risk and harms, with consideration given to alternatives to prosecution, including public health management.

Center for HIV Law and Policy. *Collection of statements from leading organizations urging an end to the criminalization of HIV and other diseases (updated May 2016).* Center for HIV Law and Policy; 2014. Available at:

<http://www.hivlawandpolicy.org/sites/default/files/Collection%20of%20Statements%20from%20Leading%20Organizations%20Urging%20an%20End%20to%20the%20Criminalization%20of%20HIV%20and%20Other%20Diseases%20%28rev.%205.26.16%29.pdf>.

The following statements call for an end to the use of the criminal law to target the conduct of people living with HIV and other diseases, and reflect the growing consensus among medical experts, public health officials, and policy makers that criminalization of HIV and other diseases institutionalizes and promotes HIV stigma.

- Presidential Advisory Council on HIV/AIDS (PACHA), Resolution on Ending Federal and State HIV-Specific Criminal Laws, Prosecutions, and Civil Commitments (2013)
- U.S. Department of Justice, Best Practices Guide to Reform HIV-Specific Criminal Laws to Align with Scientifically-Supported Factors (2014)
- National Association of Criminal Defense Lawyers (NACDL), Resolution of the Board of Directors of the NACDL Concerning HIV Criminalization (2016)
- American Medical Association (AMA), Modernization of HIV Specific Criminal Laws (2014)
- The Association of Nurses in AIDS Care (ANAC), HIV Criminalization Laws and Policies Promote Discrimination and Must Be Reformed (2014)
- Infectious Diseases of America (IDSA) and HIV Medicine Association (HIVMA), Position on the Criminalization of HIV, Sexually Transmitted Infections and Other Communicable Diseases (2015)
- American Academy of HIV Medicine (AAHIVM), Policy Position Statement on HIV Criminalization (2015)
- American Psychological Association (APA), Resolution Opposing HIV Criminalization (2016)
- National Alliance of State and Territorial AIDS Directors (NASTAD), National HIV/AIDS Strategy Imperative: Fighting Stigma and Discrimination by Repealing HIV-Specific Criminal Statutes (2011)
- National Association of County & City Health Officials (NACCHO), Statement of Policy: Opposing Stigma and Discrimination Against Persons with Communicable Diseases (2013)
- U.S. Conference of Mayors, Resolution on HIV Discrimination and Criminalization (2013)

- Positive Justice Project, National Consensus Statement on the Criminalization of HIV (2012) (statement features more than 1000 organizational and individual endorsements from across the United States).

Center for HIV Law and Policy. *Consensus statement on HIV "Treatment as Prevention" in criminal law reform.* Center for HIV Law and Policy; 2017. Available at: <https://www.hivtaspcrimlaw.org/the-consensus-statement>.

The Consensus Statement on HIV "Treatment as Prevention" in Criminal Law Reform was collaboratively created to serve as an important new resource in efforts to modernize HIV criminal laws, particularly for state advocates. There is no disagreement that treatment developments have transformed what it means to be living with HIV. PLHIV are thriving and living long and productive lives; and effective treatment has the additional and hugely important benefit of reducing a PLHIV's risk of onward transmission to effectively zero. A small group of organizations and advocates drafted this statement to clearly and accessibly capture concerns about the use of "Treatment as Prevention" (TasP) or "Undetectable = Untransmittable" (U=U) in the criminal law reform context. Criminal law reform, including HIV criminal law reform, must address the unjust disproportional impact of our criminal legal system on people of color, GLBTI people, sex workers, and the financially disadvantaged.

Note: The statement was first published in July 2017. The website site provides links to a variety of resources that can help support the use of the statement, as well as an FAQ.

Center for HIV Law and Policy. *Selected policy statements and support for ending HIV criminalization in the United States (updated 2016).* Center for HIV Law and Policy; 2016. Available at: <http://www.hivlawandpolicy.org/sites/default/files/Crim.%20Policy%20Supplement-Policy%20and%20Legal%20articles-statements%20%282016%20update%29.pdf>.

This document identifies particularly useful policy statements and law journal articles that support arguments against HIV criminalization. Divided into policy statements, legal summaries, and representative articles, the resources are summarized and quotations that may be useful for lawyers and advocates are highlighted. This resource is intended primarily to support those working against HIV criminalization or representing persons with HIV in criminal proceedings.

Kazatchkine C, Bernard E, Eba P. Ending overly broad HIV criminalization: Canadian scientists and clinicians stand for justice. *J Int AIDS Soc.* 2015;18:20126. PMC4508673.

In Canada, people living with HIV who do not disclose their HIV status prior to sexual acts risk prosecution for aggravated sexual assault even if they have sex with a condom or while having a low (or undetectable) viral load, they had no intent to transmit HIV, and no transmission occurred. In 2013, six distinguished Canadian HIV scientists and clinicians took ground-breaking action to advance justice by co-authoring the "Canadian consensus statement on HIV and its transmission in the context of the criminal law." This effort was born out of the belief that the application of criminal law to HIV non-disclosure was being driven by a poor appreciation of the science of HIV. More than 75 HIV scientists and clinicians Canada-wide have now endorsed the statement, agreeing that "[they] have a professional and ethical responsibility to assist those in the criminal justice system to understand and interpret current medical and scientific evidence regarding HIV." As some 61 countries have adopted laws that specifically allow for HIV criminalization, and prosecutions for HIV non-disclosure, exposure and transmission have been reported in at least 49 countries, the authors hope that others around the world will take similar action.

Loutfy M, Tyndall M, Baril JG, Montaner JS, Kaul R, Hankins C. Canadian consensus statement on HIV and its transmission in the context of criminal law. *Can J Infect Dis Med Microbiol.* 2014;25(3):135-140. PMC4173974.

INTRODUCTION: A poor appreciation of the science related to HIV contributes to an overly broad use of the criminal law against individuals living with HIV in cases of HIV nondisclosure. METHOD: To promote an evidence-informed application of the law in Canada, a team of six Canadian medical experts on HIV and transmission led the development of a consensus statement on HIV sexual transmission, HIV transmission associated with biting and spitting, and the natural history of HIV infection. The statement is based on a literature review of the most recent and relevant scientific evidence (current as of December 2013) regarding HIV and its transmission. It has been endorsed by >70 additional Canadian HIV experts and the Association of

Medical Microbiology and Infectious Disease Canada. RESULTS: Scientific and medical evidence clearly indicate that HIV is difficult to transmit during sex. For the purpose of informing the justice system, the per-act possibility of HIV transmission through sex, biting or spitting is described along a continuum from low possibility, to negligible possibility, to no possibility of transmission. This possibility takes into account the impact of factors such as the type of sexual acts, condom use, antiretroviral therapy and viral load. Dramatic advances in HIV therapy have transformed HIV infection into a chronic manageable condition. DISCUSSION: HIV physicians and scientists have a professional and ethical responsibility to assist those in the criminal justice system to understand and interpret the science regarding HIV. This is critical to prevent miscarriage of justice and to remove unnecessary barriers to evidence-based HIV prevention strategies.

Vernazza P, Bernard EJ. HIV is not transmitted under fully suppressive therapy: The Swiss Statement--eight years later. *Swiss Med Wkly.* 2016;146:w14246.

Note: This article outlines the Swiss Statement that was published on January 30, 2008 by the Swiss Federal Commission for AIDS-related Issues ("the Commission", now the Swiss Federal Commission for Sexual Health), reactions to the statement, and impact of the statement on criminal law applications in Switzerland and other countries. The statement has empowered more honest conversations between patients and healthcare providers, and helped facilitate the development of the official guidelines published by the World Health Organization and the International AIDS Society recognizing the effectiveness of ART.

OTHER RELEVANT RESOURCES

HIV Transmission Risk

Centers for Disease Control and Prevention. *HIV risk behaviors.* [Web page]. 2015; <https://www.cdc.gov/hiv/risk/estimates/riskbehaviors.html>.

The risk of getting HIV varies widely depending on the type of exposure or behavior (such as sharing needles or having sex without a condom). Some exposures to HIV carry a much higher risk of transmission than other exposures. For some exposures, while transmission is biologically possible, the risk is so low that it is not possible to put a precise number on it. But risks do add up over time. Even relatively small risks can add up over time and lead to a high lifetime risk of getting HIV. In other words, there may be a relatively small chance of acquiring HIV when engaging in a risk behavior with an infected partner only once; but, if repeated many times, the overall likelihood of becoming infected after repeated exposures is actually much higher. The table on the webpage lists the risk of transmission per 10,000 exposures for various types of exposures.

Cresswell FV, Ellis J, Hartley J, Sabin CA, Orkin C, Churchill DR. A systematic review of risk of HIV transmission through biting or spitting: implications for policy. *HIV Med.* 2018.

OBJECTIVES: The perceived threat of HIV transmission through spitting and biting is evidenced by the increasing use of "spit hoods" by Police Forces in the UK. In addition, a draft parliamentary bill has called for increased penalties for assaults on emergency workers, citing the risk of communicable disease transmission as one justification. We aimed to review literature relating to the risk of HIV transmission through biting or spitting. METHODS: A systematic literature search was conducted using Medline, Embase and Northern Lights databases and conference websites using search terms relating to HIV, AIDS, bite, spit and saliva. Inclusion and exclusion criteria were applied to identified citations. We classified plausibility of HIV transmission as low, medium, high or confirmed based on pre-specified criteria. RESULTS: A total of 742 abstracts were reviewed, yielding 32 articles for full-text review and 13 case reports/series after inclusion and exclusion criteria had been applied. There were no reported cases of HIV transmission related to spitting and nine cases identified following a bite, in which the majority occurred between family (six of nine), in fights involving serious wounds (three of nine), or to untrained first-aiders placing fingers in the mouth of someone having a seizure (two of nine). Only four cases were classified as highly plausible or confirmed transmission. None related to emergency workers and none were in the UK. CONCLUSIONS: There is no risk of transmitting HIV through spitting, and the risk through biting is negligible. Post-exposure prophylaxis is not indicated after a bite in all but exceptional circumstances. Policies to protect emergency workers should be developed with this evidence in mind.

Hall HI, Holtgrave DR, Tang T, Rhodes P. HIV transmission in the United States: considerations of viral load, risk behavior, and health disparities. *AIDS Behav.* 2013;17(5):1632-1636.

Ongoing HIV transmission is related to prevalence, risk behavior and viral load among persons with HIV. We assessed the contribution of these factors to HIV transmission with transmission rate models and data reported to National HIV Surveillance and published rates of risk behavior. We also estimated numbers of persons with risk behaviors and unsuppressed viral load among sexual risk groups. The transmission rate is higher considering risk behavior (18.5 infections per 100 people with HIV) than that attributed to unsuppressed viral load (4.6). Since persons without risk behavior or suppressed viral load presumably transmit HIV at very low rates, transmission can be attributed to a combination of these factors (28.9). Service needs are greatest for MSM; their number with unsuppressed viral load engaging in unprotected discordant sex was 8 times the number of male heterosexuals and more than twice the number of female heterosexuals with high-risk transmission potential. While all persons with HIV need optimal care, treatment as prevention is most relevant when risk behavior is present among persons with unsuppressed HIV viral load.

Hughes D. Condom use, viral load and the type of sexual activity as defences to the sexual transmission of HIV. *The Journal of Criminal Law.* 2013;77(2):136-150.

This article considers the position regarding the criminal transmission of HIV in English and Canadian law. It considers the use of condoms, viral loads and types of sexual activity and whether they can be used as defences in such cases. The article will look at the current position in England and also focus on recent decisions that have originated from the Canadian courts. It is argued that the recent Canadian Supreme Court judgment of *R v Mabior* is not in the public's interest and that the position should be that of the cases that were decided before that decision. It is also argued that the defences regarding the criminalisation of the sexual transmission of HIV are in need of a statutory footing.

Patel P, Borkowf CB, Brooks JT, Lasry A, Lansky A, Mermin J. Estimating per-act HIV transmission risk: a systematic review. *AIDS.* 2014;28(10):1509-1519.

BACKGROUND: Effective HIV prevention programs rely on accurate estimates of the per-act risk of HIV acquisition from sexual and parenteral exposures. We updated the previous risk estimates of HIV acquisition from parenteral, vertical, and sexual exposures, and assessed the modifying effects of factors including condom use, male circumcision, and antiretroviral therapy. **METHODS:** We conducted literature searches to identify new studies reporting data regarding per-act HIV transmission risk and modifying factors. Of the 7339 abstracts potentially related to per-act HIV transmission risk, three meta-analyses provided pooled per-act transmission risk probabilities and two studies provided data on modifying factors. Of the 8119 abstracts related to modifying factors, 15 relevant articles, including three meta-analyses, were included. We used fixed-effects inverse-variance models on the logarithmic scale to obtain updated estimates of certain transmission risks using data from primary studies, and employed Poisson regression to calculate relative risks with exact 95% confidence intervals for certain modifying factors. **RESULTS:** Risk of HIV transmission was greatest for blood transfusion, followed by vertical exposure, sexual exposures, and other parenteral exposures. Sexual exposure risks ranged from low for oral sex to 138 infections per 10,000 exposures for receptive anal intercourse. Estimated risks of HIV acquisition from sexual exposure were attenuated by 99.2% with the dual use of condoms and antiretroviral treatment of the HIV-infected partner. **CONCLUSION:** The risk of HIV acquisition varied widely, and the estimates for receptive anal intercourse increased compared with previous estimates. The risk associated with sexual intercourse was reduced most substantially by the combined use of condoms and antiretroviral treatment of HIV-infected partners.

Phylogenetics

Bernard EJ, Azad Y, Vandamme AM, Weait M, Geretti AM. HIV forensics: pitfalls and acceptable standards in the use of phylogenetic analysis as evidence in criminal investigations of HIV transmission. *HIV Med.* 2007;8(6):382-387.

BACKGROUND: Phylogenetic analysis - the study of the genetic relatedness between HIV strains - has recently been used in criminal prosecutions as evidence of responsibility for HIV transmission. In these trials, the expert opinion of virologists has been of critical importance. **PITFALLS:** Phylogenetic analysis of HIV gene sequences is complex and its findings do not achieve the levels of certainty obtained with the forensic analysis of human DNA. Although two individuals may carry HIV strains that are closely related, these will not

necessarily be unique to the two parties and could extend to other persons within the same transmission network. **ACCEPTABLE STANDARDS:** For forensic purposes, phylogenetic analysis should be conducted under strictly controlled conditions by laboratories with relevant expertise applying rigorous methods. It is vitally important to include the right controls, which should be epidemiologically and temporally relevant to the parties under investigation. Use of inappropriate controls can exaggerate any relatedness between the virus strains of the complainant and defendant as being strikingly unique. It will be often difficult to obtain the relevant controls. If convenient but less appropriate controls are used, interpretation of the findings should be tempered accordingly. **CONCLUSIONS:** Phylogenetic analysis cannot prove that HIV transmission occurred directly between two individuals. However, it can exonerate individuals by demonstrating that the defendant carries a virus strain unrelated to that of the complainant. Expert witnesses should acknowledge the limitations of the inferences that might be made and choose the correct language in both written and verbal testimony.

Scaduto DI, Brown JM, Haaland WC, Zwickl DJ, Hillis DM, Metzker ML. Source identification in two criminal cases using phylogenetic analysis of HIV-1 DNA sequences. *Proc Natl Acad Sci U S A.* 2010;107(50):21242-21247. PMC3003064.

Phylogenetic analysis has been widely used to test the a priori hypothesis of epidemiological clustering in suspected transmission chains of HIV-1. Among studies showing strong support for relatedness between HIV samples obtained from infected individuals, evidence for the direction of transmission between epidemiologically related pairs has been lacking. During transmission of HIV, a genetic bottleneck occurs, resulting in the paraphyly of source viruses with respect to those of the recipient. This paraphyly establishes the direction of transmission, from which the source can then be inferred. Here, we present methods and results from two criminal cases, *State of Washington v Anthony Eugene Whitfield*, case number 04-1-0617-5 (Superior Court of the State of Washington, Thurston County, 2004) and *State of Texas v Philippe Padieu*, case numbers 219-82276-07, 219-82277-07, 219-82278-07, 219-82279-07, 219-82280-07, and 219-82705-07 (219th Judicial District Court, Collin County, TX, 2009), which provided evidence that direction can be established from blinded case samples. The observed paraphyly from each case study led to the identification of an inferred source (i.e., index case), whose identity was revealed at trial to be that of the defendant.