WHERE REASON FEARS TO TREAD:

Ongoing HIV ignorance and discrimination in criminal and civil settings in the United States¹

The American Bar Association has maintained that HIV law and policy must be rights-based and evidence driven. While the United States has taken an important step toward tackling the domestic epidemic by launching the National HIV/AIDS Strategy, ignorance and fear continue to drive laws and policies that ignore the scientific evidence base. Despite enormous advances in our knowledge of both HIV and effective prevention and treatment options, discrimination based on poorly drawn conclusions on the risk and consequences of HIV transmission and harm reduction efforts persist. There is now widespread criminal prosecution of HIV exposure, nondisclosure and transmission among the states. Congress has recently reinstated a ban on federal funding for syringe exchange programs, vital to HIV prevention efforts. Meanwhile, the case of a young boy denied admittance to a private boarding school because his HIV was considered a "threat" to other students received national attention, and the case of a qualified police officer candidate denied employment solely because of his HIV status was recently argued in the U.S. Court of Appeals.

The following article was commissioned in advance of the XIX International AIDS Conference — to be held in July 2012 in the U.S. for the first time since 1990 — to discuss these issues in order to provide an overview of the current disconnect between evidence and law in the country and to discuss how best to address them.

¹ This article is published for informational purposes and expresses the views of its authors. Except as specified otherwise, the article does not necessarily reflect official policy of the American Bar Association.

In the thirty years since the HIV epidemic was first recognized, an estimated 1 108 611 people in the United States have been diagnosed with AIDS and 594 500 people have died.¹ From the beginning, the HIV epidemic has been marked by discrimination and associated stigma toward those living with HIV and those considered at highest risk of HIV infection. As of November 2011, the Centers for Disease Control and Prevention (CDC) estimates that 1.2 million people in the country are currently living with HIV, with one in five unaware of their status.² Approximately 50 000 Americans become infected with HIV each year.³ Federal funding for the domestic epidemic has increased only marginally since 2006,4 with potentially devastating consequences. HIV now affects primarily low-income communities of colour, including women and youth, who have long experienced more limited access to public health systems, including to HIV prevention, care, treatment and support services.5

The American Bar Association (ABA) established the AIDS Coordinating Committee (ACC) in 1987 in recognition of the unique legal issues raised by the then-five year epidemic. The ABA has since taken policy positions on a diverse number of issues involving or pertaining to HIV/AIDS, always emphasizing both the rights of individuals and the need to base policies on accurate and up-to-date evidence.6 This dual emphasis on rights and sound science has been necessary, not least because the HIV epidemic spawned a sister epidemic of stigma and discrimination against those living with HIV, largely through ignorance of the specifics of HIV transmission and transmission risks, and due to

high levels of existing stigma toward those first affected by the virus in this country: gay men and injecting drug users.⁷

While we are no longer living in the fear-charged days of the 1980s, when paranoia over a mysterious and fatal new illness drove massive and frantic speculation over how the virus is transmitted, ignorance and misunderstanding of HIV/AIDS remains significant and widespread. In a 2011 Kaiser Family Foundation report on public opinion on HIV, a third of both blacks and whites believed they could get HIV from sharing a drinking glass with a person living with HIV, swimming in a pool with someone living with HIV or using the toilet after someone living with HIV, misconceptions that were common at the onslaught of the epidemic.8 This ignorance in turn fuels continuing onslaughts on the rights of those living with and at risk of HIV9 and enables political responses to the problem to continue to be more responsive to perceived popular fears or misconceptions - often directed at or at the expense of communities most at risk — without regard to existing science.

The science of HIV: then and now

Prior to the discovery of effective HIV treatments in the mid 1990s, HIV infection almost always led to illness and early death.¹⁰ However, the introduction and now widespread use of anti-retroviral drugs has led to dramatic reductions in HIV-related illnesses and deaths, where treatment has been available.¹¹ The latest science shows that, where diagnosis and antiretroviral therapy (ART) occur early (before significant damage has been done to the immune system), those infected can go on to have a near-normal lifespan.¹²

Today, a great deal is known about HIV viral loads, per-act transmission risk and effective prevention methods that may affect the possibility of HIV transmission or exposure. Although viral load is the greatest risk factor for all modes of transmission, initiation of antiretroviral therapy (ART) can reduce the level of the virus in the bloodstream (plasma viral load) to undetectable levels,¹³ rendering the person less infectious and less likely to transmit HIV via sexual contact.14 Initiation of ART has been shown to reduce sexual transmission rates by 96 percent.¹⁵ Additionally, a large body of scientific evidence shows that male latex condoms, when used correctly and consistently, have an 80 percent or greater protective effect against the sexual transmission of HIV and other sexually transmitted infections (STIs).¹⁶ While these rates evidence the current understanding of the science as of 2012, it is nonetheless important to assess the actual risk of exposure and transmission using the most recent available data.

National HIV/AIDS Strategy

On 13 July 2010, U.S. President Barack Obama released the National HIV/AIDS Strategy (NHAS), the country's first-ever comprehensive coordinated HIV/AIDS roadmap.¹⁷ The stated vision of the NHAS is that the "US will become a place where new HIV infections are rare and when they do occur, every person regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination."¹⁸ The NHAS was developed with three primary goals: reducing the number of people who become infected with HIV; increasing access to care and optimizing health outcomes for people living with HIV; and reducing HIV-related disparities.¹⁹

Ignorance and misunderstanding of HIV/AIDS remains significant and widespread in the U.S.

Importantly, the NHAS includes specific statements and directives on HIV-related stigma and consequent discrimination, to be addressed. Noting that state HIVspecific criminal laws reflect or result from (long-outdated or repudiated) misperception of HIV's modes and relative risk of transmission, the NHAS also pointed to both the lack of evidence that these laws had any positive public health impact, as well as their negative impact on public health.²⁰ The NHAS suggests that "[i]n many instances, the continued existence and enforcement of these types of laws ...may undermine the public health goals of promoting HIV screening and treatment."21

However, despite this laudable language, significant challenges remain. The U.S. government continues to act in both disregard and defiance of the scientific evidence base, as demonstrated, not least, most recently by the re-adoption of the ban on federal funding for syringe exchange programs. While the NHAS calls upon state and local governments to join in the effort, the strategy has done little to end not only many state and local laws that criminalize HIV exposure and transmission, but pervasive federal policies inconsistent or at odds with NHAS, including those that exclude people with HIV from entering the military and the application of severe criminal charges and penalties to U.S. service members who seroconvert while in service and are accused of sexual misconduct.22

In short, while the NHAS talks the talk about reducing stigma and discrimination against people living with HIV/AIDS, to date it has led to few specific, consequential policy commitments to demonstrate that the NHAS is, in fact, the priority for the administration it professes to be.

Criminalization of HIV transmission and exposure

Criminal law in the U.S. has traditionally been, and remains, a matter handled by the states. All 50 states and the District of Columbia have their own penal codes, although Congress has used its jurisdiction to enact criminal law in certain, limited and specific areas. In most states, people living with HIV have been or are susceptible to criminal sanctions for HIV non-disclosure, exposure or transmission.²³

Some states have relied upon general criminal laws and offences such as reckless endangerment, assault, terrorist threats, homicide and attempted homicide to address HIV transmission.²⁴ Many states have "communicable" or "contagious disease" control statutes that criminalize exposure to STIs, many of which in theory could include HIV, but for the most part are rarely applied.²⁵ State prosecutors rarely use these general STI misdemeanour laws against those with any form of STI, including HIV; rather, in cases of alleged HIV exposure or non-disclosure, most states rely on HIV-specific statutes or more serious criminal laws on, for example, attempted murder, reckless endangerment and sexual assault.²⁶

Proof of intent to transmit HIV, or actual transmission, typically are not elements of these prosecutions.²⁷ Failure to disclose one's HIV status to a partner is most often the triggering basis for prosecution, rather than intent to infect someone else or actual transmission of HIV.28 Spitting or throwing HIV-infected bodily fluids at another person while in prison is also an offence in some states.29 Before 2001, 23 percent of U.S. cases that had passed through the courts were for spitting, biting, scratching or throwing body fluids, despite scientific evidence that such behaviour cannot transmit HIV.30

Studies to date demonstrate that these laws have little or no impact on risk-taking behaviour.³¹ Many state laws, and their enforcement, have been "overbroad," resulting in convictions where there was no scientific basis to conclude that there was a risk of transmission or endangerment.³² By defining prohibited conduct in terms of HIV-status and activity, individuals are prevented from demonstrating that their conduct was not sufficiently risky to merit criminalization, and the laws are thus over-inclusive.³³

Testimony of defendants with HIV is often discounted, particularly in cases where the defendant is accused of non-disclosure of HIV status by a sexual partner.³⁴ Prosecutions under HIV-specific statutes are particularly prone to targeting marginalized groups and reflecting jury prejudices.³⁵

The HIV-related laws in question were initially driven by the Ryan White Care Act of 1990 (U.S. federal legislation that required states to introduce laws criminalizing exposure to HIV as a condition of federal funding).³⁶ Today, increasing calls for criminalizing HIV transmission and exposure – primarily driven by the fear and prejudice that has accompanied the pandemic since it first appeared - now appear to be resulting from the failure of governments and non-governmental organizations to equally and adequately reach key populations in HIV outreach, education, care and treatment.

Criminalizing HIV transmission and exposure results only in further marginalization of key populations and reinforces HIV-related stigma.

The efforts at criminalization are misplaced and counter-productive, resulting only in further marginalization of key populations, preventing them from seeking or obtaining appropriate education, care or treatment. These laws further contribute to and reinforce HIV-related stigma and discrimination, especially when such cases are sensationalized by the media. The harm caused by unjustified prosecutions and convictions and stigma is not counter-balanced by any evidence of public health benefits of this use of criminal law. These laws should urgently be repealed or reformed as part of a shift to strategies centred on individual rights and accurate medical science.

Ban on federal funding of syringe exchange programs

In the U.S., injection drug users (IDUs) represented 9 percent of new HIV infections in 2009 and 17 percent of those living with HIV in 2008.³⁷ The Centers for Disease Control (CDC) estimate that people who use drugs, their partners and their children comprise one-third of all AIDS cases.³⁸ Syringe exchange programs have long demonstrated the increase in the availability of sterile syringes and consequent, reliable reduction in needle sharing among IDUs. Properly designed, such programs will provide sterile injection equipment to IDUs ensure used needles and syringes are returned for new ones and make the supply of free and legal sterile injection equipment constant.39

Moreover, as program staffers' contact with IDUs increases, the goal is to establish trust and rapport and to facilitate not only "safer" injection practices but entry into treatment for drug abuse. They are an important tool for reducing HIV infection and other blood-borne diseases among IDUs and their often unknowing sexual partners and children.⁴⁰

Extensive studies have shown that syringe exchange programs do not increase the number of new drug injectors.⁴¹ Further, where such programs include drug counselling and treatment program referrals, they actually reduce drug use and crime.⁴²

The American Medical Association (AMA) has long recognized the value of syringe exchange for reducing HIV.⁴³ In 1997, the ABA issued the following policy recommending the removal of legal barriers to syringe exchange programs:

RESOLVED, That in order to further scientifically based public health objectives to reduce HIV infection and other blood-borne diseases, and in support of our long-standing opposition to substance abuse, the American Bar Association supports the removal of legal barriers to the establishment and operation of approved needle exchange programs that include a component of drug counselling and drug treatment referrals.⁴⁴

In issuing this recommendation, the ABA relied upon the significant and serious weight of scientific evidence showing the value of syringe exchange in the prevention of HIV and other blood-borne diseases, and recognizing the need to remove legal barriers to syringe exchange programs that were blocking the implementation of the medical science on HIV prevention.⁴⁵

Despite this evidence and the recommendations of neutral experts and advocates alike, the federal government imposed a ban on federal funding for syringe exchange programming in 1998. In the case of the District of Columbia, Congress went even further by banning the District from using even its own, local funds for such programs.⁴⁶ As a result, by 2009, the city's prevalence⁴⁷ was a shocking 3 percent, well above the 1 percent benchmark for a generalized epidemic⁴⁸ and more than 20 percent of the persons living with HIV in the city were infected via intravenous drug use.⁴⁹

As the data rolled in and the runaway DC epidemic gained headlines, advocates continually fought for the repeal of the ban. Finally, in 2010, more than twenty years after its imposition, Congress passed the *Consolidated Appropriations Act of* 2010, which allowed state and local health departments to use federal funds to establish syringe exchange programs.⁵⁰

Evidence shows that syringe exchange programs are positive public health interventions that do not lead to increased drug use.

Unfortunately, Congress recently reinstated the ban on the use of federal funds for syringe exchange programming, once again citing concern that it promotes drug use, despite evidence that continues to show that such programs are positive public health interventions that do not lead to increased drug use.⁵¹

Although the latest version of the ban does not prohibit the District of Columbia from using its own funds for syringe exchange, it precludes the use of vital additional federal funding to both the District and the states. With local and state governments suffering budget shortfalls, federal funds were and remain critical to the continued existence of syringe exchange programs that meet local needs and protect communities.

In the state of New York, for example, syringe exchange programs authorized by the state health commissioner collectively provide three million sterile syringes annually, along with HIV and hepatitis prevention and testing and linkage to primary care and drug treatment. Syringe exchange programs in New York have made more than 175 000 referrals to detoxification and substance abuse treatment programs, health care services, HIV counselling and testing, and social services.

New York's syringe access programs represent a national model and a major success story in the fight against HIV/AIDS: the proportion of new diagnoses in New York attributable to injection drug use decreased from 52 percent of new AIDS cases in 1992 to 5.4 percent of new HIV cases in 2008. As the historic epicentre of the HIV/AIDS epidemic in the U.S., New York relies on preserving flexibility in use of federal funds for syringe exchange in order to meet the continued challenges of disease prevention and public health.

HIV and the American Disabilities Act

The federal *Americans with Disabilities* Act (ADA) and other federal and state laws prohibit places of 'public accommodation' from discriminating on the basis of a real or even a perceived disability,^{52,53} including HIV status.⁵⁴

There is an exception within the ADA for the "direct threat" situation. A place of public accommodation can deny the accommodation if the individual poses a "direct threat" to the health or safety of others.55 "Direct threat," as defined by the statute, describes the existence of "a significant risk to the health or safety of others that cannot be eliminated by a modification of policies, practices, or procedures or by the provision of auxiliary aids or services."56 Thus, although the plaintiff may have a disability (i.e., HIV), and the defendant is a qualifying entity under the ADA (i.e., a place of public accommodation), the plaintiff is not otherwise qualified for protection by the ADA because he or she is perceived or determined to pose a direct threat.

To determine whether an individual poses a "direct threat," the place of public accommodation must make "an individualized assessment, based on reasonable judgment that relies on current medical knowledge or on the best available objective evidence, to ascertain: the nature, duration, and severity of the risk; the probability that the potential injury will actually occur; and whether reasonable modifications of policies, practices, or procedures will mitigate the risk."⁵⁷

The analysis will turn on the court's weighing of the available medical evidence. A service provider is not entitled to demand absolute safety, but can rely only upon the direct threat defence in response to significant risks.⁵⁸ The issue of whether and under what circumstances an individual's HIV status could be considered to pose such a "direct threat" is at the heart of a current lawsuit over discrimination on the basis of HIV status.

On 30 November 2011, the AIDS Law Project of Pennsylvania filed a federal discrimination lawsuit against the Milton Hershey School in Hershey, Pennsylvania, for refusing to enrol an HIV-positive honour roll pupil, using the pseudonym "Abraham Smith."⁵⁹ The complaint, filed in U.S. District Court in Philadelphia, alleges that the school "violated multiple anti-discrimination laws" when it refused to enrol the student for the 2011–12 school year, based solely on his HIV status. Among other things, the suit seeks to have the school admit the 13-yearold, develop an anti-discrimination policy and conduct sensitivity training for all staff regarding HIV disease.

The Milton Hershey School is a cost-free, private, coeducational home and school for pre-kindergarten through 12th grade.60 It requires students to "come from a family of low income, limited resources, and social need; be from the ages of 4-15 years old; have the ability to learn; be free of serious emotional and behavioral problems ...; be able to take part in the School's program; and be born in the United States."61 The school denied Smith admission on the basis of his HIV-positive status, but asserted that they did so within the confines of the law.

The school was primarily concerned that, as it is prohibited by law from informing the community regarding Smith's HIV-positive status, Smith may potentially engage in sexual activity under its care. The school acknowledges that HIV is not transmitted through casual contact and that universal precautions can prevent transmission in typical school settings.62 Indeed, according to the National Association of State Boards of Education, "the presence of a person living with HIV infection or diagnosed with AIDS poses no significant risk to others in school, day care, or school athletic settings."63

However, it argues that its residential setting poses unique concerns.⁶⁴ Despite the school's efforts to encourage abstinence and other sexual education, teens may engage in sexual contact.65 The school also acknowledges that, when an individual is on antiretrovirals, risk of transmission is low. Nonetheless, it (or the School) concluded that "the risk was significant, and rose to the level of a direct threat to the health and safety of others."66 In a world where people are not aware of the science of HIV transmission risk or are plagued by stigma, the virus becomes perceived as a "direct threat."

AIDS Law Project Executive Director Ronda B. Goldfein is representing Abraham Smith in his suit against the school. Goldfein has remarked on the similarities between her client and the late Ryan White, an HIV-positive student who became a national spokesman for AIDS research and public education and against HIV discrimination and stigma.⁶⁷ Like White, Smith is a 13-year-old boy seeking to enter the 8th grade, confronting the same unfounded fear and ignorance about HIV. The key difference is that, in 1985, little was known about how people contracted HIV, AIDS hysteria was rampant and little was known or understood about transmission and risk, much less treatment. Today, the science of HIV prevention, care and treatment is well known and understood.

In the climate of fear and ignorance about HIV, White was expelled from 8th grade in Indiana. He endured a long legal battle fighting for the right to go to school and eventually became a national spokesman for AIDS research and education, and the namesake for the *Ryan White* *Comprehensive AIDS Resources Emergency (CARE) Act.*⁶⁸ Nearly two decades after Ryan White was denied a seat in class, the Hershey School has turned back time to an age of fear of ignorance.

"Like Ryan White, this young man is a motivated, intelligent kid who poses no health risk to other students, but is being denied an educational opportunity because of ignorance and fear about HIV and AIDS," Goldfein noted.⁶⁹ According to the complaint, Smith "is an honor roll student and an avid athlete." He controls his HIV through a regimen of medication that "do[es] not impact his school schedule." Goldfein asserts that Smith meets the admission criteria, but "just also happens to have HIV — which the school has determined is a 'documented need' it cannot meet. But my client does not need any special accommodations, nor did he ask for any."

Conclusion

Our scientific understanding of HIV, AIDS and the nature of the epidemic has come a long way since 1981. Policies and official government action in the U.S. have not kept pace and remain significantly influenced by stigma and discrimination stemming from ignorance and fear about the disease. This must end. HIVspecific criminal laws should urgently be repealed or reformed as part of a shift to strategies centred on individual rights and accurate medical science. The ban on federal funding for syringe exchange programming should be lifted, as public health laws should be grounded in public health science. Individuals living with HIV should have the same opportunities as those without the virus and should not be excluded or discriminated against on the basis of their HIV

status. It is time to put our scientific understanding into action and end HIV discrimination in the U.S.

- Ginna Anderson and Amy Hsieh

Ginna Anderson

(Ginna.Anderson@americanbar.org) is senior counsel for the Center for Human Rights and AIDS Coordination Project of the American Bar Association (ABA). Amy Hsieh (Amy.Hsieh@americanbar.org) is a law fellow with for the Center for Human Rights and the AIDS Coordination Project, as well as for the International Community of Women Living with HIV (ICW Global). Editorial assistance for this article was provided by Richard Wilson (rwilson@rwlex. com), vice-chair of the AIDS Coordination Committee of the ABA.

² Ibid.

³ Ibid.

⁴ See Kaiser Family Foundation, HIV/AIDS Policy Fact Sheet: U.S. Federal Funding for HIV/AIDS: The FY 2009 Budget Request. April 2008. On-line: <u>/</u>www.kff.org/hivaids/ upload/7029-041.pdf.

⁵ The black community, for example, has been disproportionately affected by HIV/AIDS since the epidemic's beginning, and that disparity has deepened over time. Blacks account for more new HIV infections, AIDS cases, people estimated to be living with HIV disease and HIVrelated deaths than any other racial/ethnic group in the U.S. Although blacks represent only 14 percent of the US population, an estimated 44 percent of new HIV infections in 2009 were from the black community. In addition, the epidemic has had a disproportionate impact on black women, youth and men who have sex with men, and its impact varies across the country. See Centers for Disease Control and Prevention, HIV among African Americans. November 2011. On-line: www.cdc.gov/hiv/ topics/aa/index.htm. See also Kaiser Family Foundation, HIVIAIDS Policy Fact Sheet: Black Americans and HIVIAIDS. October 2008. On-line: www.kff.org/hivaids/ upload/6089-061.pdf.

⁶ See, e.g., ABA General Policy on HIV and AIDS (Adopted 1989, revised 1990) (recommending, among other recommendations, that state and local governments enact and enforce legislation prohibiting discrimination in employment, housing, or other government services on the basis of HIV status, ensure that minority communities receive equal access to HIV-related treatment, prevention, and research programs, affirming that a student should not be excluded from school because of known or perceived HIV status, and recommending that state and localities support appropriate public health education and medical interventions); see also, ABA Recommendation on Needle Exchange (Adopted 1997) ("[I]n order to further scientifically based public health objectives to reduce HIV infection . . . the American Bar Association supports the removal of legal barriers to the establishment and operation of approved needle exchange programs''); ABA Recommendation on International Human Rights and HIV (adopted 2004) (urging "the Government of the United States to implement legislation, policies, programs, and international agreements that address or are relevant to the HIV/AIDS pandemic in a manner consistent with international human rights law and science-based prevention, care, support, and treatment.").

⁷ See, e.g., G.M. Herek, "AIDS and stigma," American Behavioral Scientist, 42 (1999): pp 1102–1112. ("Whereas the characteristics of AIDS as an illness probably make some degree of stigma inevitable, AIDS has also been used as a symbol for expressing negative attitudes toward groups disproportionately affected by the epidemic, especially gay men and injecting drug users (IDUs).").

⁸ Kaiser Family Foundation, HIV/AIDS at 30:A Public Opinion Perspective. December 2011. On-line: www.kff.org/kaiserpolls/upload/8186.pdf.

⁹ See, e.g., G.M. Herek and J.P. Capitanio, "AIDS stigma and sexual prejudice," *American Behavioral Scientist*, 42 (1999): pp. 1126–1143. (The study found that "[m] ost heterosexuals continue to associate AIDS primarily with homosexuality or bisexuality, and this association is correlated with higher levels of sexual prejudice (antigay attitudes)").

¹⁰ The World Health Organization and UNAIDS estimate that the number of years a person living with HIV survives without treatment is, on average, eleven years. See UNAIDS, AIDS epidemic update. December 2007.

¹¹ The age-adjusted HIV-related death rate in the United States dropped from 17 per 100 000 people in 1995 to about 5 per 100 000 people by the end of the decade. See Centers for Disease Control and Prevention, Trends in Annual Age-Adjusted Rate of Death due to HIV Disease, United States, 1987 — 2006.

¹² See, e.g., A. Van Sighem A, "Life expectancy of recently diagnosed, asymptomatic HIV-infected patients approaches that of uninfected individuals." Seventeenth Conference on Retroviruses and Opportunistic Infections, San Francisco, abstract 526 (2010) (available at AIDSmap. com); see also K.M. Harrison, "Life expectancy after HIV diagnosis based on national surveillance data from 25 states," *Journal of Acquired Immune Deficiency Syndromes* 53(1) (2010): pp. 124–30.

¹³ A viral load test shows how much HIV there is in a small sample of blood. The lower the viral load, the less HIV is found in the blood. The aim of HIV treatment is to reduce viral load to a level that is too low to be measured by standard tests, also known as an "undetectable" viral load. This means HIV is still present in your body, but at a low level. The HPTN 052 study showed that initiation of ART, which reduces and controls viral loads, can reduce sexual transmission rates by 96 percent. As research is rapidly developing in this area, it is critical to rely on the most current data available regarding exposure and transmission risk.

¹⁴ Centers for Disease Control and Prevention, Effect of Antiretroviral Therapy on Risk of Sexual Transmission of HIV Infection and Superinfection. August 2009. On-line: www.cdc.gov/hiv/topics/treatment/resources/factsheets/ art.htm.

¹⁵ M. Cohen et al, "Prevention of HIV-1 Infection with Early Antiretroviral Therapy," New England Journal of Medicine 365 (2011): pp. 493–505

¹⁶ World Health Organization, Condoms for HIV Prevention. On-line: www.who.int/hiv/topics/condoms/en/; D. Wilkinson, "Condom effectiveness in reducing heterosexual HIV transmission," The WHO Reproductive Health Library. On-line: http://apps.who.int/rhl/hiv_aids/dwcom/ en/index.html.

¹⁷ National HIV/AIDS Strategy for the United States. On-line: www.whitehouse.gov/sites/default/files/uploads/ NIHAS.pdf.

18 Ibid. at iii.

¹⁹ Ibid. at vii.

²⁰ Ibid. at p. 36.

²¹ Ibid. at pp. 36–7.

²² United States v. Schoolfield, 40 M.J. 132 (C.M.A. 1994) (holding that HIV-positive service member who had unprotected sex with a woman on five occasions without disclosure of his HIV status, but without evidence that he intended to infect her with HIV, was guilty of aggravated assault), cert. denied, 513 U.S. 1178 (1995).

²³ Kaiser Family Foundation, *Criminal statutes on HIV transmission*. 2008. On-line: www.statehealthfacts.org/ comparetable.jsp?ind=569&cat=11.

²⁴ See, e.g., ALA. ADMIN. CODE r. 420-4-1-.03(2008). Alabama law defines a person as acting "knowingly" when "he is aware that his conduct is of that nature of that the circumstance existed." ALA. CODE § 13A-2-2(1975).

²⁵ See, e.g., CAL. HEALTH & SAFETY CODE § 120600 (West 2010); LA. REV. STAT. ANN. § 40:1062 (2008); MONT. CODE ANN.§ 50-18-112 (1989); N.Y. PUB. HEALTH LAW § 2307 (McKinney 2001); S.C. CODE ANN.§ 44-29-60 (2009); TEINN. CODE. ANN.§ 68-10-107 (2010); VT. STAT. ANN. TIT. 18 § 1106 (1973); W.VA. CODE § 16-4-20 (2010). There has never been a prosecution for HIV exposure under any of these statutes. Prosecutions for HIV exposure, if any, have arisen out of the general criminal law or HIV-specific exposure statutes of these states.

²⁶ R. Bennett-Carlson et al., Ending & Defending against HIV Criminalization: A Manual for Advocates Vol. 1, 1st ed., Positive Justice Project, Center for HIV Law & Policy and Lambda Legal, 2010. On-line: www.hivlawandpolicy.org/ resources/view/564.

²⁷ Ibid. at p. 222.

²⁸ Ibid. at p. 134.

²⁹ See, e.g., *Ginn v. State*, 667 S.E.2d 712 (Ga. Ct. App. 2008) (affirming conviction in case that resulted from the defendant's former sexual partner applying for an arrest warrant with magistrate court and giving a statement to sheriff's department against the defendant for failing to inform him of her HIV status, although her HIV status was published on the front page of a local newspaper before she commenced the sexual relationship).

¹ Centers for Disease Control and Prevention, *HIV in the United States.* November 2011. On-line: www.cdc.gov/hiv/ resources/factsheets/us.htm.