Testimony in favor of: <u>HB0485</u> Public Health – Prohibition on Transfer of Human Immunodeficiency Virus – Repeal

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My name is Andrea Wirtz Liu. I am a Maryland state citizen and resident from Baltimore County. I am an epidemiologist and Associate Professor in the Bloomberg School of Public Health at Johns Hopkins University. I submit this testimony representing myself. I am writing in favor of *HB0485 Public Health, Repeal of the Prohibition on Transfer of Human Immunodeficiency Virus* on the basis of my expertise in the field of HIV research and human rights.

Criminalization of HIV transmission does not reflect current science: MD Code, Health-Gen §18-601.1, which creates a misdemeanor for 'knowingly transfer or attempt to transfer' HIV to another person, was passed in 1989. Since then, highly effective antiretroviral therapy treatment of HIV infection and therapeutics for the prevention of HIV acquisition have been developed and are a widely available in the United States. Current treatments significantly reduce disease progression and have demonstrated improvements in life expectancy and quality of life for people living with HIV.¹⁻³ Further, clinical trials have shown that HIV is not transmissible when a person living with HIV has undetectable viral loads achieved through adherence to antiretroviral treatment.⁴⁻⁶ Likewise, the risk of HIV acquisition is reduced by 99% through adherent use to HIV pre-exposure prophylaxis (PrEP)^{7,8} or through use of post-exposure prophylaxis (PEP)^{9,10} in situations when prevention strategies were not used prior to an exposure.

In the time since Maryland and other states have criminalized HIV transmission, rigorous scientific research has demonstrated that there is no evidence that criminalization laws promote disclosure of HIV status¹¹ nor is there evidence that such laws reduce sexual risk behaviors.^{12,13} Rather, research has shown that people who know they are living with HIV are significantly less likely to engage in sexual behaviors that may risk HIV transmission to a sexual partner.¹⁴ The US Centers for Disease Control and Prevention concurs with these findings.¹⁵

Criminalization of HIV transmission disproportionately criminalizes Black people and reinforces health disparities. Research has shown that HIV criminalization laws have been disproportionately applied to racial and ethnic minoritized groups and this appears to be true in the state of Maryland. A recent analysis of prosecutions for offense under MD Code, Health-Gen §18-601.1 found that there have been at least 104 cases and at least 148 separate charges for "knowingly transferring HIV to another" in Maryland between 2000 to 2020.¹6 Enforcement was largely localized to Baltimore City, Montgomery County, and Prince George's county.¹6 Black people comprised the majority (82%) of people with HIV-related criminal cases, despite representing only 30% of the state's population and 71% of people living with HIV in the state.¹6

Criminalization of HIV transmission reinforces HIV stigma and stands in the way of public health and clinical efforts. In opposition to their intended effect, HIV criminalization laws (including MD Code, Health-Gen §18-601.1) effectively thwart ongoing public health efforts to end the HIV epidemic in

the U.S. Research has shown that HIV criminalization laws increase stigma, exacerbate racial and ethnic disparities, and discourage HIV testing. 13,17 Stigma of HIV also serves as a deterrent to use of PrEP, which uses the same medications as HIV treatment, due to fear that an observer may interpret PrEP medications to signify that the user is living with HIV. Indeed, a recent analysis of HIV criminalization laws and HIV incidence found that US states with an HIV criminalization law were significantly more likely than those without such laws to have higher countywide HIV incidence rate for all residents. 18 This association was even more pronounced for Black and Hispanic/Latinx populations. 18

In 2024, we have highly effective biomedical prevention and treatment of HIV and collective will to end the HIV epidemic in the U.S. However, stigma and discrimination of HIV – which are reinforced by criminalization laws - continue to challenge these public health efforts. *It is for these reasons that I support HB0485 Public Health, Repeal of the Prohibition on Transfer of Human Immunodeficiency Virus*. Repealing this law is necessary to reduce stigma of HIV and for Maryland to achieve its public health goals.

Thank you for your consideration.

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References:

- 1. Lee FJ, Amin J, Carr A. Efficacy of initial antiretroviral therapy for HIV-1 infection in adults: a systematic review and meta-analysis of 114 studies with up to 144 weeks' follow-up. *PLoS One* 2014; **9**(5): e97482.
- 2. Survival of HIV-positive patients starting antiretroviral therapy between 1996 and 2013: a collaborative analysis of cohort studies. *Lancet HIV* 2017; **4**(8): e349-e56.
- 3. Trickey A, Glaubius R, Pantazis N, et al. Estimation of Improvements in Mortality in Spectrum Among Adults With HIV Receiving Antiretroviral Therapy in High-Income Countries. *J Acquir Immune Defic Syndr* 2024; **95**(1s): e89-e96.
- 4. Rodger AJ, Cambiano V, Bruun T, et al. Sexual Activity Without Condoms and Risk of HIV Transmission in Serodifferent Couples When the HIV-Positive Partner Is Using Suppressive Antiretroviral Therapy. *Jama* 2016; **316**(2): 171-81.
- 5. Cohen MS, Chen YQ, McCauley M, et al. Prevention of HIV-1 infection with early antiretroviral therapy. *New England journal of medicine* 2011; **365**(6): 493-505.
- 6. Cohen MS, Chen YQ, McCauley M, et al. Antiretroviral Therapy for the Prevention of HIV-1 Transmission. *N Engl J Med* 2016; **375**(9): 830-9.
- 7. Fonner VA, Dalglish SL, Kennedy CE, et al. Effectiveness and safety of oral HIV preexposure prophylaxis for all populations. *Aids* 2016; **30**(12): 1973-83.
- 8. Molina J-M, Capitant C, Spire B, et al. On-demand preexposure prophylaxis in men at high risk for HIV-1 infection. *New England Journal of Medicine* 2015; **373**(23): 2237-46.
- 9. Schechter M, do Lago RF, Mendelsohn AB, Moreira RI, Moulton LH, Harrison LH. Behavioral impact, acceptability, and HIV incidence among homosexual men with access to postexposure chemoprophylaxis for HIV. *J Acquir Immune Defic Syndr* 2004; **35**(5): 519-25.
- 10. Poynten IM, Smith DE, Cooper DA, Kaldor JM, Grulich AE. The public health impact of widespread availability of nonoccupational postexposure prophylaxis against HIV. *HIV Med* 2007; **8**(6): 374-81.
- 11. Burris S, Beletsky L, Burleson J, Case P. Do criminal laws influence HIV risk Behavior-An empirical trial. *Ariz St LJ* 2007; **39**: 467.
- 12. 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): 1221-8.
- 13. Lazzarini Z, Galletly CL, Mykhalovskiy E, et al. Criminalization of HIV transmission and exposure: research and policy agenda. *Am J Public Health* 2013; **103**(8): 1350-3.
- 14. Lampe FC, The Antiretrovirals STR, Group AS. Sexual behaviour among people with HIV according to self-reported antiretroviral treatment and viral load status. *AIDS* 2016; **30**(11): 1745-59.
- 15. Mermin J, Valentine SS, McCray E. HIV criminalisation laws and ending the US HIV epidemic. *The Lancet HIV* 2021; **8**(1): e4-e6.
- 16. Cisneros N, Tentindo W, Sears B, Macklin M, Bendana D. Enforcement of HIV Criminalization in Maryland: The Williams Institute,, 2024.
- 17. Kesler MA, Kaul R, Loutfy M, et al. 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.
- 18. Keralis JM. HIV Criminalization Laws and Enforcement: Assessing the Relationship Between HIV Criminalization at the State Level, Policing at the County Level, and County-level HIV Incidence Rates. *AIDS Behav* 2023; **27**(11): 3713-24.