Bringing Science to HIV Justice

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LAWYERS FOR HIV AND TB JUSTICE

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Restrict the use, if any, of criminal law in the context of HIV, *ideally to intentional transmission only*. Where it is used, criminal justice principles (including key criminal law principles of legality, foreseeability, intent, causality, proportionality and proof) should be upheld.

Best available scientific and medical evidence should guide any use of criminal law.

Treat like harms alike, with proportionate penalties.

Condoms or low viral load = no significant risk; use shows no intent to harm.

Non-disclosure alone is not proof of malicious intent.

Limitations of scientific tests for use in HIV forensics (e.g. phylogenetic analysis / Recent Infection Testing Algorithm).
Swiss experts say individuals with undetectable viral load and no STI cannot transmit HIV during sex

Edwin J. Bernard
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CONSENSUS STATEMENT

Canadian consensus statement on HIV and its transmission in the context of criminal law

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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.
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.
HIV FORENSICS PAPER: 2007

**HIV forensics: pitfalls and acceptable standards in the use of phylogenetic analysis as evidence in criminal investigations of HIV transmission.**

Bernard EJ, Azad Y, Vandamme AM, Weail M, Geretti AM.

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**Abstract**

**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.

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[Index for MEDLINE] Free full text
HIV forensics: proving causality

Using scientific and other evidence to attempt to reconstruct alleged criminal HIV transmission

Each piece of evidence part of a much larger puzzle:

• Fact – infected by someone else?
• Timing – before or after diagnosis/disclosure?
• Direction – who infected who?
HIV forensics: phylogenetic analysis

Unlike DNA, unable to create a definitive ‘match’.

Are the viruses related?

• Yes - adds to evidence.
• No - exonerates accused.
HIV forensics: transmission networks
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- HIV Criminalization Undermines the HIV Response
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- Initiating Policy & Law Reform
- Supporting Fair & Robust Trials
- Using Science to Prove your Argument
- Working with Police
- Educating Prosecutors
Using Science to Prove your Argument

Our knowledge of HIV has increased significantly since the first identification of AIDS in 1981. There has been rigorous academic study of the way HIV behaves in the body, the way HIV is transmitted, the effect of HIV on the body, and the way people experience their HIV infection.

Scientific research on sexual transmission of HIV is persuasive. Using expert scientific evidence often introduces people to information about HIV they did not previously know, dispelling harmful, persistent myths. Using scientific research well can help convince people of the modern reality of HIV transmission risk, harms, and human behaviour.
The HIV Justice Network is a global information and advocacy hub for individuals and organisations working to end the inappropriate use of the criminal law to regulate and punish people living with HIV.

Find out more

Ending overly broad criminalisation of HIV non-disclosure, exposure and transmission: Critical scientific, medical and legal considerations

OSLO DECLARATION ON HIV CRIMINALISATION

Prepared by international civil society in Oslo, Norway on 13th February 2013

1. Recognising that criminalising HIV non-disclosure, exposure and transmission perpetuates discrimination and stigmatisation of the millions of people living with HIV, undermines human rights and hinders access to testing, care and treatment;

2. Finding that criminalising HIV non-disclosure, exposure and transmission harms the millions of people living with HIV by reinforcing stigma, discriminating against them, intimidating them into remaining untested and undiagnosed, discouraging them from seeking care, and leading to avoidable HIV-related deaths;

3. Finding that the transmission of HIV from an infected person to another person is rare and that the prevention of HIV transmission is possible through promotion of safe sex and through antiretroviral treatment;
EXAMPLES OF SUCCESSFUL APPLICATION OF SCIENCE TO JUSTICE IN EUROPE

• 2005: Supreme Court of The Netherlands first to limit law based on actual HIV risk.
• 2009: Geneva Court of Justice quashed an HIV ‘exposure’ conviction following ‘Swiss statement’ on HIV risk.
• 2011: Denmark’ suspended HIV-specific law, due to reduced harm via changes in life expectancy.
• 2008-12: Limitations of phylogenetics for proof of timing/direction of transmission and impact of ART on transmission risk incorporated into England and Wales and also Scotland prosecutorial guidelines.
• 2013: 'Swedish statement' on sexual HIV risk impacting lower court rulings, clinician practice.
• 2015: Czech Republic Supreme Court considers HIV risk in appeal.