



CANADIAN | RÉSEAU
HIV·AIDS | JURIDIQUE
L E G A L | CANADIEN
NETWORK | VIH·SIDA

**Healthy Public Policy:
Assessing the Impact of Law and Policy on
Human Rights and HIV Prevention and Care**

Summary Report

**Healthy Public Policy:
Assessing the Impact of Law and Policy on
Human Rights and HIV Prevention and Care**

Summary Report
July 2003

Prepared by Maria Nengeh Mensah
for the Canadian HIV/AIDS Legal Network

For further information about this paper, please contact:
Canadian HIV/AIDS Legal Network
Tel: 514 397 6828
Fax: 514 397 8570
Email: info@aidslaw.ca
Website: www.aidslaw.ca

Further copies of this document can be retrieved at
www.aidslaw.ca/Maincontent/reports.htm#dpafr

© 2003 Canadian HIV/AIDS Legal Network

Funding for this project was provided by the Health Canada
under the Canadian Strategy on HIV/AIDS through the National Health Research and
Development Program.

We gratefully acknowledge contributions from the following individuals:
Thomas Kerr and Evan Wood for final editing of the report; Ralf Jürgens and Richard Elliott of
the Canadian HIV/AIDS Legal Network for reviewing and editing various drafts of this report;
Alix Adrien of the Direction de la santé publique in Montreal; Theodore de Bruyn, a consultant in
health policy in Ottawa; and Rick Marchand of the Community Based Research Centre in
Vancouver, who generously accepted to peer review this document.

The findings, interpretations, and views expressed in this publication
are entirely those of the author and do not necessarily reflect
official policy or positions of Health Canada
or the Canadian HIV/AIDS Legal Network.

Also available in French under the title *Des politiques publiques saines: évaluer l'impact que les
lois et politiques ont sur les droits de la personne, la prévention et les soins pour le VIH –
Rapport sommaire.*

Contents

<u>Executive Summary</u>	4
<u>Why is research on the impact of laws and policies important?</u>	4
<u>What does this summary report contain?</u>	5
<u>Section I: Methodology</u>	7
<u>Section II: Literature Review on Impact of Law/Policy in General</u>	8
<u>2.1 Law and Policy As Structural Determinants of Health</u>	8
<u>2.1.1 Constituting the context in which individuals and populations behave</u>	9
<u>2.1.2 Affecting other determinants of health</u>	12
<u>2.1.3 Implications on health as a human right</u>	13
<u>2.2 Structural Factors Associated With HIV Prevention and Care</u>	14
<u>2.2.1 Direct or proximal effects</u>	16
<u>2.2.2 Indirect or distal effects</u>	17
<u>2.2.3 Simultaneous direct and indirect effects</u>	19
<u>Section III: Literature on Impact of Law/Policy in Specific HIV/AIDS-related Areas</u>	23
<u>3.1 Laws and Policies Regarding HIV Testing, Reporting and Partner Notification</u>	23
<u>3.1.1 Theoretical literature</u>	23
<u>3.1.2 Empirical data</u>	26
<u>3.2 Drug Laws and Policies</u>	30
<u>3.2.1 Theoretical literature</u>	30
<u>3.2.2 Empirical data</u>	33
<u>3.3 Laws and Policies that Regulate Sex Work</u>	36
<u>3.3.1 Theoretical literature</u>	36
<u>3.3.2 Empirical data</u>	38
<u>3.4 Criminalizing HIV Transmission/Exposure</u>	41
<u>3.4.1 Theoretical literature</u>	41
<u>3.4.2 Empirical data</u>	44
<u>Section IV: Conclusions</u>	47

Executive Summary

Why is research on the impact of laws and policies important?

Many people intuitively understand that factors such as income, employment, education and social support systems affect physical and mental health. There is a body of literature illustrating the effects of these determinants on health, both generally and in specific relation to HIV prevention, care, treatment and support. A population health approach, the conceptual basis of the Canadian Strategy on HIV/AIDS, acts upon this broad range of determinants to promote health.

Laws and policies also affect the health of individuals, communities and populations, but are not often included among the determinants of health. In some cases, the impact on health is direct and easily observed. A law denying health insurance to a certain group of people will negatively affect the health of that group and the individuals within it, for example. In other cases, the health impact of a law or policy may be more indirect or diffuse. Laws and policies are *structural* determinants, in that they often determine the other, more widely recognized determinants of health. Yet the impact of laws and policies on health has not attracted the same attention from researchers as other determinants, although there is increasingly a call for “evidence-based policy” in many areas, including the area of health-related policy.

At the same time, as a matter of law and of ethical obligation, human rights standards should guide national and local policy-makers in making HIV-related policy.¹ Therefore, “healthy public policy” is characterized by explicit concern for both health and human rights and by accountability for the impact on both. But what is the relationship between health and human rights? As the World Health Organization has explained:

There are complex linkages between health and human rights:

- Violations or lack of attention to human rights can have serious health consequences;
- Health policies and programs can promote or violate human rights in the ways they are designed or implemented;
- Taking steps to respect, protect and fulfil human rights can reduce vulnerability and the impact of ill health.²

The mere assertion that health and human rights are interdependent – and that policy that respects and promotes the human rights of people living with HIV/AIDS and vulnerable groups is therefore sound public health policy – is often insufficient to guide the response of policy-makers to HIV/AIDS and related issues. If legal and policy responses are to be effective, it is essential to base them on sound empirical understanding: “AIDS laws must not be based upon ignorance,

¹ E.g., Joint United Nations Programme on HIV/AIDS and the Office of High Commissioner for Human Rights. *HIV/AIDS and Human Rights: International Guidelines*. Second International Consultation on HIV/AIDS and Human Rights, Geneva, 23-25 September 1996. New York, Geneva: United Nations, 1998. Available at: www.unaids.org/humanrights/

² World Health Organization. *25 Questions and Answers on Health and Human Rights*. Health and Human Rights Publication Series, Issue No. 1, July 2002. Available on-line at: www.who.int

fear, political expediency and pandering to the demand of the citizenry for ‘tough’ measures. Good laws, like good ethics, will be founded in good data.’³

What does this summary report contain?

This report was derived from a larger project designed to identify priority issues to be studied within the context of a community-based research project. Included in this report are the project’s review, summary and synthesis of literature pertaining to the health impact of laws and policies, including:

- Literature that outlines the theoretical impact of various laws and policies related to HIV/AIDS; and
- Empirical data from quantitative and qualitative studies that make the connections between structural factors associated with HIV/AIDS and the health of individuals and populations.

This summary report does not contain the environmental scan and recommendations included in the larger project. The full report of the larger project includes data derived from key informant interviews, and concludes with recommendations concerning research that should be done to illuminate the impact of law/policy on HIV prevention, care, treatment and support (the full report is available, in English only, at <http://www.aidslaw.ca/Maincontent/reports.htm#dpafr>).

Section I of the summary report describes the methodology used for the literature review.

Section II summarizes general research on laws and policies as structural determinants of health. Laws and policies, health-related or otherwise, operate as structural determinants of health by: (1) constituting the physical and social context in which individuals and populations behave, defining options and influencing choices; and (2) interacting with other known determinants of health. We also know that the impact of laws and policies may be related to health directly, indirectly or both. Current research strongly suggests that laws and policies influence a person’s risk of HIV infection, the speed with which HIV infection will progress to AIDS, and a person’s ability to manage and live with HIV/AIDS.

Section III summarizes literature in four specific research areas of HIV/AIDS-related laws/policies: (1) HIV testing, reporting and follow-up; (2) drug use; (3) sex work; and (4) criminalizing HIV transmission/exposure.

Literature on the impact of laws and policies on HIV testing, reporting and partner notification raises individual and public health concerns. We know, for example, that the impact of name-based surveillance on partner notification programs and on access to HIV testing may have been exaggerated. We also know that HIV/AIDS continues to raise many issues that relate to stigmatization. However, we do not fully understand whether these laws/policies affect people’s willingness to test for HIV, particularly with respect to specific populations that may be at different levels of risk or be drawn from different socio-economic strata.

³ Kirby M. *A Paradoxical Relationship of Mutual Interest*. Paper presented at IUVDT World STD/AIDS Congress, Singapore, 22 March 1995. Available on-line at: www.fl.asn.au/resources/kirby/papers/

Literature on the impact of drug laws and policies reveals the negative effects criminalization of drug use has on harm reduction and access to HIV prevention and care for people who use injection drugs, as well as the positive effects of harm reduction programs and policies, such as needle exchange. However, there is still the need for a stronger empirical base demonstrating how police enforcement of prohibitions on possession of controlled substances specifically impacts on HIV prevention and care.

Literature on the impact of laws and policies that regulate sex work raises the issue that sex workers are vulnerable to HIV, as they routinely lack the materials, the information or the authority to protect themselves and their clients. We know that criminalization of sex work means that sex workers are subject to abuse, discrimination and stigmatization and forced to work in high-risk conditions that compromise HIV prevention efforts. We also know that vulnerability to HIV is best dealt with through prevention efforts emphasizing peer education, rather than through regulating prostitution. Further research is required to determine the impact of policies that regulate sex work, including local codes and municipal by-laws across Canada that could potentially affect HIV prevention and care for people who work in the sex industry.

Legal analysis of various uses of criminal sanctions to address conduct that transmits or risks transmitting HIV exists. However, there is no empirical research documenting the lived effects of the criminalization of HIV transmission/exposure on the health and human rights of either HIV-positive or HIV-negative persons, nor is there empirical research on the impact of such laws on HIV prevention or access to care, treatment and support. Available literature raises the question of whether criminal laws and prosecutions represent a public policy response to HIV-risking conduct that will, ultimately, promote health. In particular, there is theoretical analysis suggesting that a law requiring people to disclose their HIV-positive status to sexual partners will affect willingness to test for HIV, preference for anonymous or nominal testing, to whom they disclose, and how and in what circumstances they disclose. Yet, research data regarding the empirical impact of criminalization of HIV transmission or exposure in Canada are non-existent.

Research that analyzes the impact of laws or policies on the human rights and health of individuals and communities infected and affected by HIV/AIDS is urgently needed. With this evidence, decision-makers can avoid enacting laws, making legal judgments or creating policies that infringe upon human rights or threaten the health of individuals or the public generally. Such research will help in responding to HIV/AIDS by creating a legal/policy environment that supports, rather than undermines, HIV prevention efforts and promotes, rather than impedes, HIV/AIDS care, treatment and support. Most importantly, research on the impact of laws and policies will assist people living with HIV/AIDS by informing their own advocacy and building communities' capacity to improve health for all.

Section I: Methodology

The review of the larger project from which this report was derived focused on medical, legal, social sciences and public health literature addressing connections among health (specifically in relation to HIV/AIDS), human rights and the implementation of laws and policies. Because of the volume of existing literature and the short duration of the project, it was not the objective of this review to cover all areas of law/policy in the context of HIV/AIDS and human rights. Instead, the literature review narrowed its focus to the following areas of research:

- Law and policy as structural determinants of health; and
- Specific issues of health and human rights that are relevant to:
 - Laws and policies regarding HIV testing, reporting and follow-up;
 - Drug laws and policies;
 - Laws and policies that regulate sex work; and
 - Criminal sanctions for behaviours that can result in transmitting HIV.

The review was restricted to literature that was published recently (e.g., 1995 or later). Literature was gathered between September 2001 and June 2002. Information was obtained primarily from:

- The Resource Centre of the Canadian HIV/AIDS Legal Network;
- Library and database searches undertaken in universities and other policy and research centres in Canada;
- Materials produced by Health Canada and other governmental agencies;
- Individuals and organizations with expertise in law/policy research, including the Legal Network's membership;
- Several e-mail discussion forums; and
- A search of the Internet.

The literature gathered from these diverse sources was both theoretical and empirical. Therefore, the methodology for compiling research data involved: (1) noting the theoretical impact of laws and policies on health and human rights; and (2) noting empirical findings describing actual observed impact of specific laws/policies on HIV prevention and care.

Section II: Literature Review on Impact of Law/Policy in General

2.1 Law and Policy As Structural Determinants of Health

Many people intuitively understand that factors such as income, employment, education, gender and social support systems affect physical and mental health, and there is a body of literature to support this perception,^{4, 5, 6, 7, 8, 9} particularly in relation to HIV/AIDS.¹⁰ Health Canada, for instance, acknowledges this reality by making the population health approach the basis for its Canadian Strategy on HIV/AIDS.¹¹ Population health is defined as an approach “that aims to improve the health of the entire population and to reduce health inequities among population groups. In order to reach these objectives, it looks at, and acts upon, the broad range of factors and conditions that have a strong influence on our health.”¹²

The population health approach thus identifies individual and collective factors, and their interactions, as *determinants of health*.¹³ These include:

- Income and social status
- Social support networks
- Education
- Employment and working conditions
- Social environments
- Physical environments
- Personal health practices and coping skills
- Child development
- Biology and genetic endowment
- Health services
- Gender¹⁴
- Culture

⁴ Lalonde M. *A New Perspective on the Health of Canadians*. Ottawa: Ministry of Supply and Services, 1974.

⁵ Health and Welfare Canada. *Achieving Health for All: A Framework for Health Promotion*, 1986.

⁶ Labonté R. *Health Promotion and Empowerment: Practice Frameworks*. Toronto: Centre for Health Promotion, University of Toronto and ParticipAction, 1993.

⁷ Federal/Provincial/Territorial Advisory Committee on Population Health. *Report on the health of Canadians*. Ottawa: Minister of Public Works and Government Services Canada, 1996.

⁸ Federal/Provincial/Territorial Advisory Committee on Population Health. *Toward a healthy future: Second report on the health of Canadians*. Ottawa: Minister of Public Works and Government Services Canada, 1999.

⁹ Health Canada, Population and Public Health Branch, Strategic Policy Directorate. *The Population Health Template: Key Elements and Actions That Define A Population Health Approach*. Ottawa: Minister of Public Works and Government Services Canada, 2001. Available at: www.hc-sc.gc.ca/hppb/phdd/pdf/discussion_paper.pdf

¹⁰ For example, see: Spigelman M et al. *HIV/AIDS and Health Determinants: Lessons for Coordinating Policy and Action - A Discussion Paper for the Ministerial Council on HIV/AIDS*. Ottawa: Health Canada, 2002.

¹¹ Health Canada. *Current Realities: Strengthening the Response - Canada's Report on HIV/AIDS 2001*. Ottawa: Minister of Public Works and Government Services Canada, 2001. Available at: www.hc-sc.gc.ca/hppb/hiv_aids/can_strat/pdf/wad01/aids_e.pdf

¹² Information available at: www.hc-sc.gc.ca/hppb/phdd/approach/index.html

¹³ Federal/Provincial/Territorial Advisory Committee on Population Health. *Report on the Health of Canadians*, Report prepared for the Ministry of Health, Health Canada, 1998. Available at: www.hc-sc.gc.ca/iacb-dgiac/nhrdp/healthofcanadians/index-e.htm

¹⁴ “Gender” and “culture” were not included as determinants of health in the 1998 FPT report. They were subsequently added by Health Canada. See: Bhatti T Hamilton N. Health Promotion: What is it? *Health Policy Research Bulletin* 2002; 1(3): 5-7 (www.hc-sc.gc.ca/iacb-dgiac/arad-draa/english/rmdd/bulletin/issue3_1.html) at

This list may not be exhaustive and the categories are not discrete,¹⁵ but a determinants of health approach recognizes that lifestyle, social and physical environment, genetics and quality and availability of health care contribute to a person's health in complex ways.¹⁶ For instance, determinants of health are believed to interact and overlap as they affect the health status of individuals and populations. It is often not possible to draw a direct causal relationship between a single determinant, or group of determinants, and health status. Rather, the relationships are associative, and specific determinants may not always produce the same outcome.¹⁷

Although most people intuitively recognize that laws/policies can affect people's health, current lists of the determinants of health do not specifically mention laws/policies as health determinants for individuals and populations, and consequently their impact is often overlooked. Rarely are health-related laws/policies themselves directly included in explanations of the conditions that influence health. Nevertheless, there is a limited amount of literature describing law/policy as a structural determinant of health. This literature points to ways laws/policies, health-related or otherwise, are structural factors that can determine health status by (1) constituting the physical and social context or environment in which individuals and populations behave, defining options and influencing choices; and (2) interacting with known determinants of health.

2.1.1 Constituting the context in which individuals and populations behave

The *Ottawa Charter for Health Promotion* is internationally recognized as both a standard and a foundation for health promotion efforts.¹⁸ The Charter includes social justice and equity as important health prerequisites and it suggests that governments could improve public health by building healthy public policy, creating supportive environments, strengthening community action, developing personal skills and redirecting health services so as to place more emphasis on preventing disease:

note 1, which references Health Canada. *Towards a Common Understanding: Clarifying Core Concepts of Population Health*. A Discussion Paper Developed by the Conceptual Framework Subgroup of the Working Group on Population Health Strategy. Ottawa: Health Canada, 1996 (www.hc-sc.gc.ca/hppb/phdd/docs/common/index.html).

¹⁵ For example, one might ask why the determinant of health called "gender" is listed separately. If "gender" means specific physiological features of people that can affect health status (e.g., women's greater physiological susceptibility to HIV infection than men's through penetrative vaginal sex), then what is referred to are aspects of "biology and genetic endowment", another of the listed determinants of health. If "gender" refers to the ways in which discrimination against women as a social category can affect health, then this is an issue not limited to gender; rather, the issue is how discrimination (based on gender but also other factors, such as race, sexual orientation, etc.) is a determinant of health, and this is an aspect of "social environment." Yet discrimination is not just an aspect of social environment; it is also a legal concept and the treatment of discrimination in/by the law affects other determinants of health (e.g., income, employment, education, etc.). These considerations are raised here as an example indicating the need for improving our current understandings of determinants of health, and the relationship between them.

¹⁶ Mustard JF, Frank JW. The Determinants of Health from a Historical Perspective. *Daedalus: Journal of the American Academy of Arts and Sciences* 1994; 123(4): 1-19

¹⁷ Howard D et al. (eds) *Primary Health Care: Six Dimensions of Inquiry*. Edmonton: Howard Research and Instructional Systems Inc., 2000: at 53-65. Available at: www.health.gov.ab.ca/key/phc/resource/

¹⁸ Hayes M, Glouberman S. *Population health, sustainable development and policy futures*. Ottawa: Canadian Policy Research Networks, 1999: 6.

Health promotion focuses on achieving equity in health. Health promotion action aims at reducing differences in current health status and ensuring equal opportunities and resources to enable all people to achieve their fullest health potential. This includes a secure foundation in a supportive environment, access to information, life skills and opportunities for making healthy choices. People cannot achieve their fullest health potential unless they are able to take control of those things which determine their health. This must apply equally to women and men.¹⁹

The Charter recognizes the potential for law/policy to shape the physical and social context or environment that determines health status. It states: “It is coordinated action that leads to health, income and social policies that foster greater equity. Joint action contributes to ensuring safer and healthier goods and services, healthier public services, and cleaner, more enjoyable environments.” Inversely, these environments define health-related options and influence choices available; they structure the ways in which the health of individuals and populations is produced and reproduced.²⁰

Structural determinants of health can include the economic, cultural, legal and political environments of a given society, which themselves are related and affect each other. Elements of the legal and policy environment can include laws and legal institutions or actors, policy implementation (broadly defined to include litigation, regulation, law enforcement, and the setting of administrative, organizational and product standards), and community engagement in legal/policy debate.²¹

The reason for identifying law/policy as a *structural* determinant of health, that facilitates or inhibits HIV prevention and care, is that it forms part of the context or environment surrounding individuals, albeit outside their direct control; their context is always already defined by law, policy or administration. Health is structurally determined in that individuals or groups may not make healthy choices because contextual legal, political or law enforcement factors may prevent them from doing so.

Structural interventions, then, will “locate the source of public health problems in factors in the social, economic and political environments that shape and constrain individual, community and societal health outcomes” and “recognize that health improvements can require change in or challenges to the normal functioning of organizations, institutions, or whole social or economic systems”.²² Healthy public policy in this sense indeed means “policy enacted by the various levels

¹⁹ Canadian Public Health Association, Health and Welfare Canada, World Health Organization. *Ottawa Charter for Health Promotion*. Copenhagen: World Health Organization Regional Office for Europe, 1986. Available at: www.who.int/hpr/archive/docs/ottawa.html

²⁰ Hancock T. Beyond Health Care: From Public Health Policy to Healthy Public Policy. *Canadian Journal of Public Health* 1985; 76 (Suppl 1): 9-11.

²¹ Burris S. “Law as a Structural Factor in Health: Introduction and Conceptual Framework.” In conference materials from *Health, Law and Human Rights: Exploring the Connections, An International Cross-Disciplinary Conference Honoring Jonathan M. Mann* Philadelphia, 2001: at 818.

²² Blankenship KM et al. Structural Interventions in Public Health. *AIDS* 2000; 14 (Suppl 1): at S11.

of government that is characterized by explicit concern for health and equity, and by accountability for health impact".²³

Social epidemiologists have carried out investigations to search for socio-structural characteristics that promote (or inhibit) health and are rooted in the economy, culture, politics and the law.²⁴ Few, however, have specifically examined whether and how law/policy may be operating to create or promote (un)healthy social conditions. One analytic framework posits that by shaping what kinds of environments people live and work in, law/policy is both an *explanatory* variable determining population health and a potential *means* for improving it.²⁵

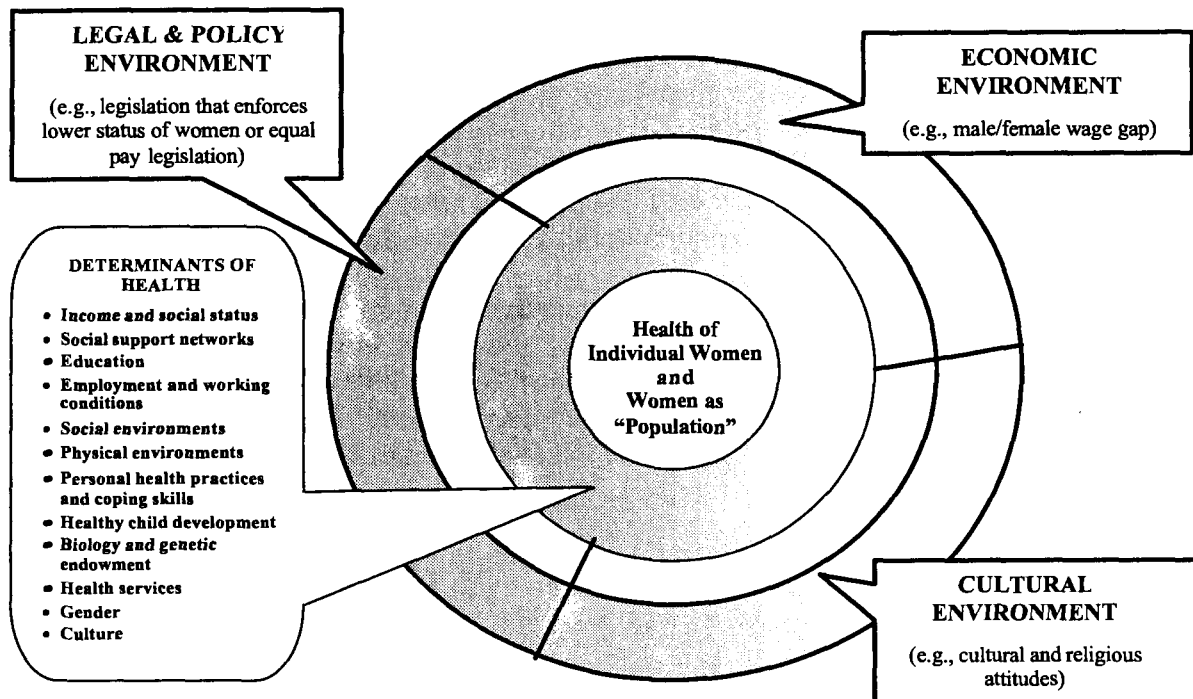
Figure A takes the example of the structural environment of female individual and population health to illustrate how consideration of the legal and policy environment can contribute to a deeper understanding of the complex mechanisms underlying women's health. The figure illustrates that law/policy is one part of the structural environment that affects health; it interacts with economic and cultural environments in determining health and creating or remedying inequalities in health.

²³ Office of Health Promotion B.C. Ministry of Health. Healthy Public Policy. *Health Promotion in Action*, Fall 1991; 7.

²⁴ For example, the NiHonSan study [cited in: Marmot, MG et al. Lessons From the Study of Immigrant Mortality. *Lancet*, 1984; i: 1003-1006] demonstrated that heart attack rates increased dramatically among Japanese immigrants as they moved from their homeland to the US. The closer they moved to the US mainland, the higher was their risk of heart attack. Heart attack rates were highest among Japanese who settled in San Francisco, intermediate among those who settled in Hawaii, and remained the lowest among those who stayed behind. Obviously, genes had little to do with these trends, but neither could lifestyle factors, such as diet, account for much of the differences. In other words, one is forced to look towards societal and cultural factors to explain why the Japanese maintain the highest longevity in the world, despite having among the highest smoking rates in the world (among men), and spending roughly half of what the US does on medical care.

²⁵ Kawachi I et al. Law as a Social Determinant of Health. In conference materials from *Health, Law and Human Rights: Exploring the Connections, An International Cross-Disciplinary Conference Honoring Jonathan M. Mann*. Philadelphia, September 2001.

Figure A. The Structural Environment of Female Individual and Population Health



Notes: The circles illustrate the health of women as individuals and as a "population" as affected by a variety of factors. The outer circles refer to structural factors of social organization and include (1) economic, (2) cultural and (3) legal and policy environments that impact the health of individual women and of populations. The inner circles refer to (other) determinants of health, which are structured by political economy, culture and laws/policies and, in turn, determine the conditions under which people live, work and stay healthy (or get sick). All the circles are interconnected in such a way that they often cannot be isolated from each other.

For example, cultural and religious attitudes towards women are a major determinant of women's health achievement at the national level. Based on imbalances in the population sex ratio between women and men, it has been estimated that there are perhaps 100 million "missing women" in the world [see: Sen AK. *Development as freedom*, New York: Alfred A. Knopf, 1999]. Countries such as China, Pakistan and India have far fewer women in their population than men, because of practices such as sex-selective abortion, female infanticide and the preferential treatment of boys (e.g., better nutrition, better access to health care). The unequal treatment of women is by no means confined to the less developed countries of the world. Closer to home in the US, it has been demonstrated that the level of women's autonomy (as gauged by the male/female wage gap, the feminization of poverty, and the representation of women in politics) is an important determinant of women's health achievement [see: Kawachi I et al. *Women's Status and the Health of Women and Men: A View from the States*. *Social Science & Medicine* 1999; 48: 21-32].

In this example, laws/policies are both an explanatory variable determining women's health (as in its role in rationalizing lower status for women, or more immediately in the form of legislation that enforces lower status), as well as a means of remedying gender inequality (as in equal pay legislation). [For more detail, see: Kawachi et al. 2001, *op. cit.*]

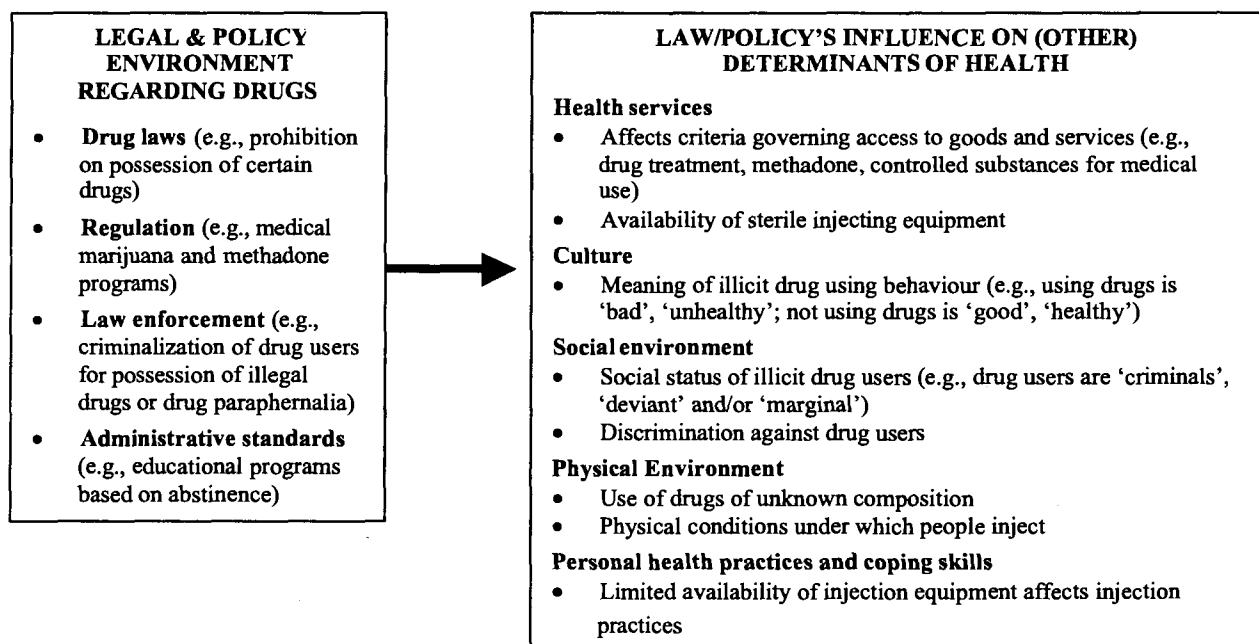
2.1.2 Affecting other determinants of health

The interconnected structural environments noted above shape the determinants of health with consequent interrelated impacts on health. For example, laws/policies structure individual and population health by determining individuals' physical environments (e.g., access to shelter, denial of residence in Canada), their development as children (e.g., family poverty, access to

child care), their health practices (e.g., use condoms or sterile injection equipment), and their use of health services (e.g., insurance coverage for medications, drug pricing laws, equitable access to medical procedures, safety and efficacy of drugs consumed). Laws/policies may also affect how we experience our biological endowment (e.g., protection against discrimination in employment or housing based on disability, sex, or race/ethnicity).

Figure B takes the example of the legal and policy environment regarding illegal drugs to illustrate how structural determinants affect other determinants of health. Laws and legal institutions, regulation, law enforcement, and the setting of administrative standards, structure known determinants of health such as provision of health services, culture, social and physical environment, and personal health practices. As will be discussed in more detail below, the contribution to the spread of blood-borne disease of drug laws/policies, particularly in terms of syringe access and possession, is an excellent example of this complex interaction.

Figure B. The Legal and Policy Environment Affects Determinants of Health



2.1.3 Implications on health as a human right

Finally, because health is defined as a “state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity,”²⁶ health is also a human right. This definition has important conceptual and practical implications: it illustrates the indivisibility and interdependence of human rights as they relate to health,²⁷ and it points to the far-reaching effects of the law/policy environment on the human rights of individuals and populations.

²⁶ World Health Organization. *Constitution of the World Health Organization*, adopted by the International Health Conference, New York, 19 June-22 July 1946, and signed on 22 July 1946 by the representatives of 61 States.

²⁷ Kirby M. The Right to Health Fifty Years On: Still Skeptical? *Health and Human Rights* 1999; 4: 7-24.

While the right to health has been set out in a number of international legal instruments, health and government responsibility for health are codified in legal/policy documents in several ways. For instance, the “right to the highest attainable standard of health” appears in one form or another in most international legal instruments relating to health and, even more importantly, nearly every article of every document can be understood to have clear implications for health.²⁸ Therefore, laws/policies that comply with or infringe on a specific human right affect not only that particular right in isolation, but health status as well. In other words, rights relating to discrimination, autonomy, information, education and participation are an integral and indivisible part of the achievement of the highest attainable standard of health, just as the enjoyment of health is inseparable from that of other rights, whether categorized as civil, political, economic, social or cultural.²⁹

2.2 Structural Factors Associated With HIV Prevention and Care

Communities that are affected by the HIV/AIDS epidemic have long identified ways in which structural factors affect their health. For example, those who use illegal drugs recognize that drug laws/policies affect their capacity for effectively reducing drug-related harm.³⁰ Some literature now exists on laws/policies as structural factors implicated in health and other human rights, in terms of both HIV prevention and care. This is a rapidly emerging research area in response to the fact that structural factors have been under-studied and under-utilized: much health research has emphasized individual-level behavioural and biomedical prevention and care, and even “population health” social science research focussing on various population-level determinants of health has not tended to incorporate analysis of the impact that law/policy can have on health and its determinants.

Structural factors associated with HIV prevention and care are broadly defined to include physical, social, cultural, organizational, community, economic, legal or policy aspects of the environment that impede or facilitate efforts to avoid HIV infection. These factors have different names in the literature – environmental, structural, societal, super-structural, policy, contextual and others – often reflecting the disciplines and experiences of the writers. Experts in HIV policy, research and service implementation are beginning to describe the ways that structural barriers create vulnerable populations and sustain high-risk behaviours, and the ways that structural facilitators support safe or healthy behaviours.^{31, 32, 33, 34, 35}

²⁸ Mann JM et al. Health and Human Rights. *Health and Human Rights* 1994; 1: 6-23. This article discusses how public health policies and practices affect human rights. For the authors, this is true not just in the familiar sense that public health measures sometimes entail infringements of individual autonomy or privacy, but also in more subtle ways: for example, in setting policy priorities or allocating resources, public health agencies may discriminate against segments of the community in impermissible ways.

²⁹ Gruskin S, Tarantola, D. “Health and Human Rights”. In Detels R et al. (eds). *The Oxford Textbook of Public Health*, 4th edition. Oxford University Press, 2002; at: 311-355. Available at: www.oup.co.uk/pdf/0-19-263041-5_04-1.pdf

³⁰ E.g., see the analysis by the Vancouver Area Network of Drug Users, a non-profit organization based in downtown Vancouver, British Columbia that works to improve the lives of people who use illicit drugs. Information at: www.vandu.org/

³¹ Merson MH. “International Perspective on AIDS Prevention Research”, In *NIH Consensus Development Conference. Interventions to Prevent HIV Risk Behaviors: Program and Abstracts*. Washington DC: National Institutes of Health, 1997: at 101-106.

In June 2000, the journal *AIDS* dedicated a special issue to the topic of structural factors and determinants in HIV prevention. This supplement publication provides useful definitions and frameworks for understanding structural factors associated with HIV and points to several broad conclusions:

- Structural barriers or facilitators may be put in place by a myriad of interveners, including governments, service organizations, businesses, workers' organizations, faith communities, justice systems, media organizations, educational systems and healthcare systems.³⁶
- Initiatives to prevent health risks other than HIV have focused on structural supports or constraints that influence the availability, acceptability and accessibility of the materials or environments needed by individuals to maintain safe behaviours.³⁷
- Political and economic factors that help foster the spread of HIV and progression to AIDS in developing countries are equally pertinent among disadvantaged populations in developed countries.³⁸
- Structural barriers to HIV prevention and care particularly affect those populations at highest risk for HIV: gay men and other men who have sex with men, specific ethno-racial communities, injection drug users, vulnerable women and youth.³⁹

Research that demonstrates the relationship between structural factors and HIV is still rare. Yet, where available, this research can inform the development of healthy public policy. For example:

- Following the implementation of a comprehensive national HIV/AIDS prevention policy in Switzerland, researchers were able to attest to an increase in reports of condom use between steady partners by up to 24% and between casual partners by up to 48% in the Swiss general population.⁴⁰ These findings suggest that a general-population approach to AIDS prevention policy has a positive impact on condom-based protection against HIV infection.

³² Aggleton P. Global Priorities for HIV/AIDS Intervention Research. *International Journal of STD AIDS* 1996; 7: 13-16.

³³ Dowsett G. The Indeterminate Macro-Social: New Traps For Old Players in HIV/AIDS Social Research. *Culture Health and Sexuality* 1999; 1:95-102.

³⁴ Marks G et al. Reducing Sexual Transmission of HIV In Those Who Know They Are Infected: The Need For Personal and Collective Responses. *AIDS* 1999; 13: 297-306.

³⁵ International Council of AIDS Service Organizations. *Inventory of Human Rights Research and HIV/AIDS*, 2000.

³⁶ Sumatojo E. Structural and Environmental Factors in HIV Prevention: Concepts, Examples, and Implications for Research. *AIDS* 2000; 14 (Suppl 1): S3-S10.

³⁷ Blankenship KM et al. Structural Interventions in Public Health. *AIDS* 2000; 14 (Suppl 1): S11-21.

³⁸ Parker RG et al. Structural Barriers and Facilitators in HIV Prevention: A Review of International Research. *AIDS* 2000; 14 (Suppl 1): S22-32.

³⁹ In particular see *AIDS* 2000; 14 (Suppl 1): Fullilove RE et al. The Family Program: A Structural Intervention With Implications for the Prevention of HIV/AIDS and Other Community Epidemics: at S63-67; O'Leary A, Martins P. Structural Factors Affecting Women's HIV Risk: A Life-Course Example: at S68-72; Shriver MD et al. Structural Interventions to Encourage Primary HIV Prevention Among People Living With HIV: at S57-62; Wohlfeiler D. Structural and Environmental HIV Prevention For Gay and Bisexual Men: at S52-S56; and Rotheram-Borus MJ. Expanding The Range of Interventions to Reduce HIV Among Adolescents: at S33-S40.

⁴⁰ Dubois-Arber F et al. Increased Condom Use Without Other Major Changes in Sexual Behavior Among the General Population in Switzerland. *American Journal of Public Health* 1997; 87:558-566.

- One study of the Canadian experiences of living with HIV/AIDS since the introduction of protease inhibitors and the widespread adoption of various forms of combination therapy found that US immigration policies have a negative impact on the health and human rights of Canadians living with HIV.⁴¹ Qualitative data revealed that the US maintains an overtly discriminatory policy regarding the entry of seropositive people. Since border guards are unable to discern who is seropositive, the on-the-ground effect of the policy is enforcement against those who carry medication for HIV disease. The authors conclude that the policy works, then, not as a barrier against the virus, but “as a barrier to adherence to medication, to support networks, and to the ability to earn a living.”⁴²

As part of the emerging effort to assess the relationship between structural factors and HIV, interdisciplinary meetings of researchers and policy-makers have identified the impact (positive or negative) of structural factors associated with HIV on two levels.^{43, 44, 45} Law/policy impact may:

- Have direct (proximal) effects;
- Be indirectly related to health (distal effects); or
- Act simultaneously at both direct and indirect levels.

2.2.1 Direct or proximal effects

At a direct (proximal) level, structural factors affect HIV prevention and care more immediately, such as when policies are put into place (e.g., to make HIV prevention services legal, accessible and acceptable) or when there are changes in laws/policies (e.g., regarding entitlement to or delivery of care, treatment and support services to improve the quality of life). Here, structural barriers or facilitators are closely linked to specific behaviours or related to specific health outcomes. Some research has considered the direct impact of structural factors on health. For example:

- One study assessing the impact of price on condom use in Louisiana found that when a program based on distribution of condoms at no charge was replaced with one providing low-cost (\$0.25) condoms, the percentage of condom use among persons reporting two or more sex partners decreased (from 77% to 64%).⁴⁶ Researchers found that individuals who reported

⁴¹ Adam BD et al. *Living With Combination Therapies*. Toronto: Ontario HIV Treatment Network, 2001: at 54.

⁴² Ibid.

⁴³ Sumartojo E et al. *Structural Barriers and Facilitators in HIV Prevention: Executive Summary of A Meeting Sponsored by the Behavioral Intervention Research Branch; Division of HIV/AIDS Prevention; National Center for HIV, STD, and TB Prevention and Control; Centers for Disease Control and Prevention*. Atlanta, GA, 22-23 February 1999.

⁴⁴ *Health, Law and Human Rights: Exploring the Connections - An International Cross-Disciplinary Conference Honoring Jonathan M. Mann*. Sponsored by the American Society of Law, Medicine and Ethics; Temple University Beasley School of Law; American Foundation for AIDS Research. Philadelphia, PA, September 29 - October 1, 2001.

⁴⁵ Mann JM, Tarantola DMJ. *AIDS in the World II*. New York: Oxford University Press, 1996.

⁴⁶ Cohen D et al. Cost As A Barrier to Condom Use: The Evidence For Condom Subsidies in the United States. *American Journal of Public Health* 1999; 89:567-568.

picking up free condoms were significantly more likely to report using condoms during their last sexual encounter than those who reported not picking up free condoms. The authors concluded that cost is a barrier to the acquisition and use of condoms, and that free condoms should be available to persons at risk for HIV. This kind of research takes into account the idea that individuals may want to use condoms but be unable to access them or use them because the legal and policy environment prevents them from doing so or makes it more difficult for them to do so. Healthy public policy informed by this research would strive toward increasing free access to condoms wherever possible.

- Another example concerns how changes in policy are closely related to specific health outcomes. In 1993, the surveillance case definition of AIDS in Canada was changed to add three new clinical condition indicators: pulmonary tuberculosis, recurrent bacterial pneumonia and invasive cervical cancer.⁴⁷ The inclusion of these three new indicator diseases addressed to some degree concerns of underestimating AIDS in women and injection drug users (the new classification increased the number of women and IDUs diagnosed as having AIDS, thereby allowing these populations access to AIDS-related prevention, care, treatment and support). It also provided a new administrative framework that affected the very understanding of this disease's epidemiology.

Direct or proximal effects of laws/policies on individual and population health are more easily amenable to direct structural interventions aimed at promoting health.

2.2.2 Indirect or distal effects

At the broadest indirect level, elements of the structural environment (economic, cultural and legal/policy) affect HIV risk and confound or facilitate HIV prevention and care. Laws/policies regulate, which is to say that they not only define prohibited behaviour, but also explicitly or by implication authorize behaviour. For example, a law/policy that prohibits employment discrimination against a person living with HIV who can perform his or her job with or without reasonable accommodation also by implication authorizes discrimination against a person with HIV whose disability more seriously impairs the ability to perform the job function. Discrimination, in this respect, is a legal concept (freedom from discrimination is a human right) as well as a structural factor that can have indirect effects on health. HIV/AIDS-related discrimination has been defined as "any measure entailing any arbitrary distinction among persons depending on their confirmed or suspected HIV serostatus or state of health".⁴⁸ These societal attitudes and AIDS-related stigma, in turn, may impede specialized prevention programs targeting high-risk groups, or lead to legal barriers to accessing other health services. Structural factors have distal effects on health because the health outcome is far removed and outside individuals' direct control.

⁴⁷ Laboratory Center for Disease Control and Prevention (Health Canada). Revision of the Surveillance Case Definition for AIDS in Canada. *Canada Communicable Disease Report*, August 1993; 19-15: 116-117.

⁴⁸ Joint United Nations Programme on HIV/AIDS cited in: Canadian HIV/AIDS Legal Network. *HIV/AIDS and Discrimination. InfoSheet 2 - Stigma and Discrimination: Definitions and Concepts*. Montreal: The Network, 1999.

Laws/policies also operate on a deeper social level by imposing costs or conferring benefits, or by rationing access to health-related behaviours, services or products.⁴⁹ In either role, laws/policies most powerfully operate indirectly, by influencing expectations or the understanding of experience, rather than by explicitly compelling or forbidding specific acts or guarding certain prerequisites. For example, the beliefs that HIV is easily spread and that people living with HIV/AIDS should be blamed for their illness are important ingredients of discrimination and stigma. These beliefs have been nurtured and validated by coercive and punitive legal/policy measures directed at those vulnerable to or living with HIV/AIDS, such as quarantine or compulsory HIV testing without prior consent or protection of confidentiality.⁵⁰ Some research has considered the indirect impact of stigmatization on HIV prevention and care. For example:

- One US survey found that fewer Americans now want to quarantine people with AIDS (PWAs) compared to ten years ago – 12% of those polled in 1999 agreed that PWAs should be separated from the rest of society, compared to 34% in 1991 – but growing numbers blame PWAs for their illness and don't understand how HIV/AIDS is and is not transmitted.⁵¹ The authors concluded that: “such fears are likely to have detrimental effects on PWAs and persons at risk for HIV. They will also affect the success of programs and policies intended to prevent HIV transmission. Thus, eradicating AIDS stigma remains an important public health goal for effectively combating HIV.”
- Another US study found that stigma associated with sexually transmitted diseases is a very powerful barrier to obtaining medical care.⁵² Other studies have shown that fear of stigma has deterred individuals from being tested for HIV and from disclosing their seropositive status to

⁴⁹ Blankenship et al., *op. cit.*: at S11-21.

⁵⁰ Bayer R. *Private Acts, Social Consequences. AIDS and the Politics of Public Health*. New York: The Free Press, 1989.

⁵¹ Herek GM et al. HIV-Related Stigma and Knowledge in the United States: Prevalence and Trends, 1991-1999. *American Journal of Public Health* 2002; 92 (3): 371-377. This study compared findings from national telephone surveys completed in 1991, 1997, and 1999, which measured public attitudes toward people diagnosed with AIDS. More than 2,500 American adults were asked to share their opinions about people with AIDS (PWAs) and various, government AIDS policies. The researchers found a 40% increase between 1991 and 1997 in the number of Americans believing that people who got AIDS through sex or drug use deserve their illness. While 20% expressed this view in 1991, 28% did so in 1997. By 1999, the figure had declined to 25%, but was still higher than at the beginning of the decade. They also found that many Americans still express fear and discomfort about people with AIDS. In 1999, 30% of those polled would feel uncomfortable having their children attend school with another child who has AIDS, and 22% would feel uncomfortable around an office co-worker with AIDS. The proportion saying they felt afraid of people with AIDS declined from 35% in 1991, but was still one in five. The study also found that mistaken beliefs about how AIDS is transmitted remain widespread, and in some cases even increased over the 1990s. In 1999, 41% believed they could get AIDS from using public toilets, compared to 34% in 1991. And 50% of those surveyed in 1999 believed that they could get AIDS from being coughed on by a person with AIDS, compared to 46% in 1991. In addition, about half of those surveyed in 1999 believed they could get AIDS by sharing a drinking glass, and one third believed that AIDS can be contracted by donating blood.

⁵² Fortenberry JD et al. Relationships of Stigma and Shame to Gonorrhea and HIV Screening. *American Journal of Public Health* 2002; 92: 378-381.

sexual partners, family and friends; this is especially true for women living with HIV/AIDS.⁵³
54, 55, 56, 57

- One study on HIV-related attitudes and behaviours in the general population of Quebec also concluded that this kind of research data can be used to tailor HIV information and prevention campaigns as well as to measure the impact of such campaigns on changes in attitudes towards people living with HIV/AIDS over time.⁵⁸

Discrimination and stigmatization have indirect or distal effects on health, and are often far removed from individuals' control. They affect health through inequalities in health distribution, thereby exacerbating the risk. Indirect effects accumulate into significant health differences over time in the life course of individuals and populations, and are often mediated through direct effects.⁵⁹

2.2.3 Simultaneous direct and indirect effects

In addition, laws/policies may operate simultaneously at both direct and indirect levels. Proximal structural factors include laws/policies that might directly affect the behaviour of a segment of society, such as IDUs or recipients of publicly funded services, while having a more indirect impact on the general population.⁶⁰ These direct and indirect effects on the health of individuals and populations are amenable to structural intervention, through the removal of legal/policy barriers (which would address the proximal determinants) or the institution of legal/policy changes that would address the distal factors.

In sum, laws/policies directly affect the determinants of health, and the effect on health is cumulative. Sometimes that cumulative effect is through law/policy's simultaneous impact on several different determinants. In other circumstances, the cumulative effect may be more like a set of Russian dolls, with multiple layers of effect on a single determinant. As one author has pointed out, "current research strongly suggests that the social determinants of health influence a person's risk of HIV infection, the speed with which HIV infection will progress to AIDS and a

⁵³ Chesney MA, Smith AW. Critical Delays in HIV Testing and Care: The Potential Role of Stigma. *American Behavioral Scientist* 1999; 42:1162-1174.

⁵⁴ Gielen AC et al. Women's Disclosure of HIV Status: Experiences of Mistreatment and Violence in an Urban Setting. *Women's Health* 1997; 25: 19-31.

⁵⁵ Derlega VJ et al. "Personal Accounts on Disclosing and Concealing HIV-Positive Test Results: Weighing the Benefits and Risks." In: Derlega VJ, Barbee AP (eds). *HIV and Social Interaction*. Thousand Oaks, CA: Sage, 1998: at 147-164.

⁵⁶ Simoni JM et al. Women's Self-Disclosure of HIV Infection: Rates, Reasons, and Reactions. *Journal of Consulting and Clinical Psychology* 1995; 63: 474-478.

⁵⁷ Lester P, Partridge JC, Chesney MA, Cooke M. The consequences of a positive prenatal HIV antibody test for women. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1995; 10: 341-349.

⁵⁸ Leane V, Adrien A. *Les Québécois face au sida: Attitudes envers les personnes vivant avec le VIH et gestions des risques*. Montreal: Direction de la santé publique, Régie régionale de la santé et des services sociaux de Montréal-Centre, 1998.

⁵⁹ Lerer LB et al. Health for All: Vision to Strategy – The Role of Health Status and Determinants. *World Health Statistics Quarterly*, 1998, 51: 7-20.

⁶⁰ Sweat MD, Denison JA. Reducing HIV Incidence in Developing Countries With Structural and Environmental Interventions. *AIDS* 1995; 9: S251-S257.

person's ability to manage and live with HIV/AIDS."⁶¹ These three areas of HIV/AIDS-related health outcomes are understood here as the result of the complex impact of structural determinants of health which affect (other) determinants of health.

Illustrations

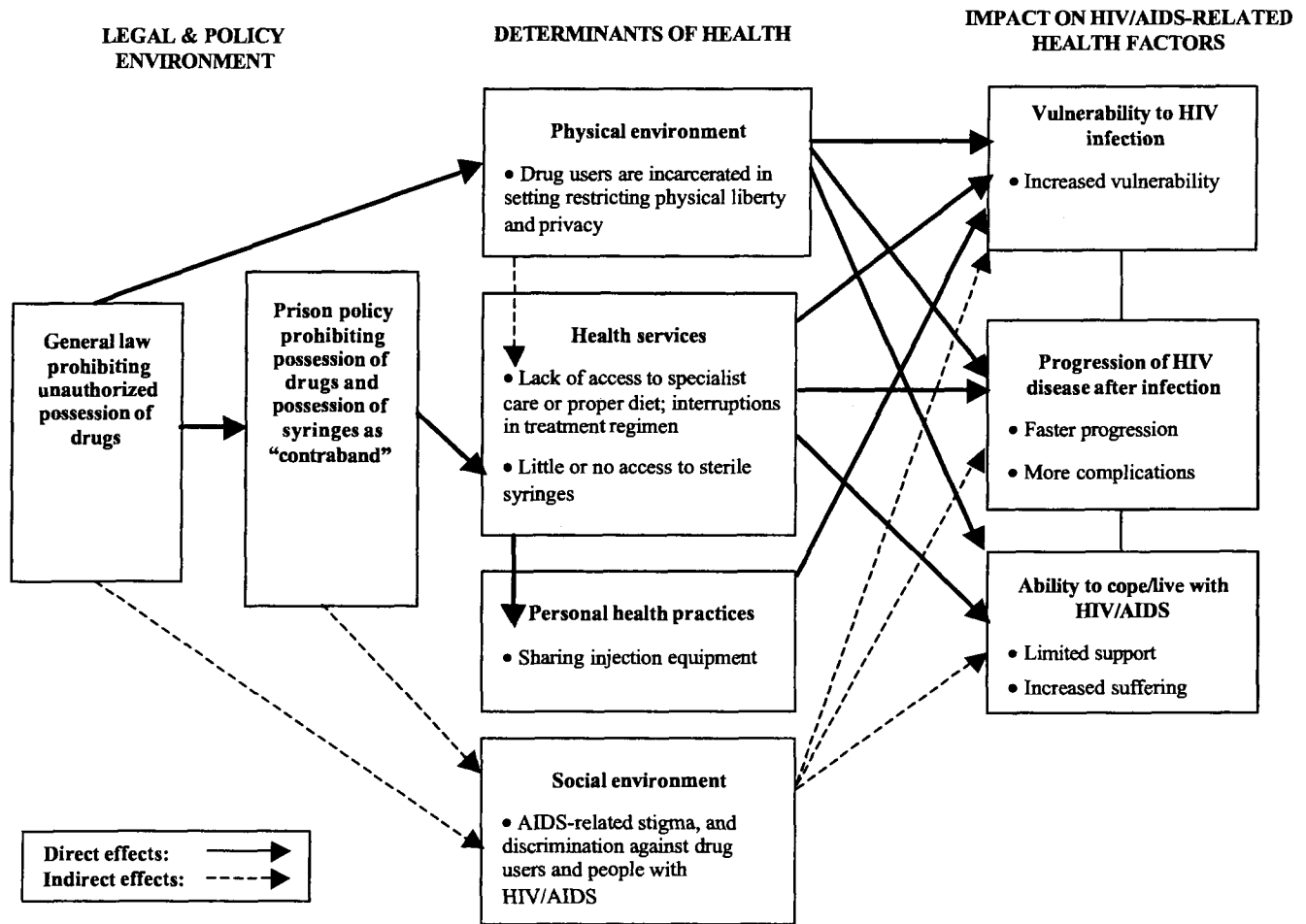
The following illustrations outline the complex character of law/policy as a structural determinant of HIV/AIDS-related health outcomes.

Figure C shows how law/policy prohibiting the unauthorized possession of controlled substances, combined with prison policies prohibiting the possession of syringes inside prison, have cumulative, synergistic effects on several determinants of health in prisoners, which ultimately heighten prisoners' vulnerability to HIV infection, the progression of their HIV disease, and their ability to cope/live with HIV/AIDS in prisons. This suggests that the impact of drug laws needs to be considered in shaping: (1) policy aimed at preventing HIV infection; (2) policies aimed at ensuring or improving access to care, treatment and support for persons with HIV disease; and (3) policies aimed at mitigating the broader impact of HIV/AIDS.

However, law-makers must also be vigilant to realize when policies have unintended and negative consequences, as in the case of prisoners' risk of HIV. Figure D illustrates in more detail how drug laws operate to affect one specific determinant of health (i.e., personal health practices), thereby having an impact on health.

⁶¹ Spigelman M et al. *HIV/AIDS and Health Determinants: Lessons for Coordinating Policy and Action - A Discussion Paper for the Ministerial Council on HIV/AIDS*. Ottawa: Health Canada, 2002: at 36.

Figure C. Cumulative Impact of Drug Laws and Policies on the Health of Prisoners



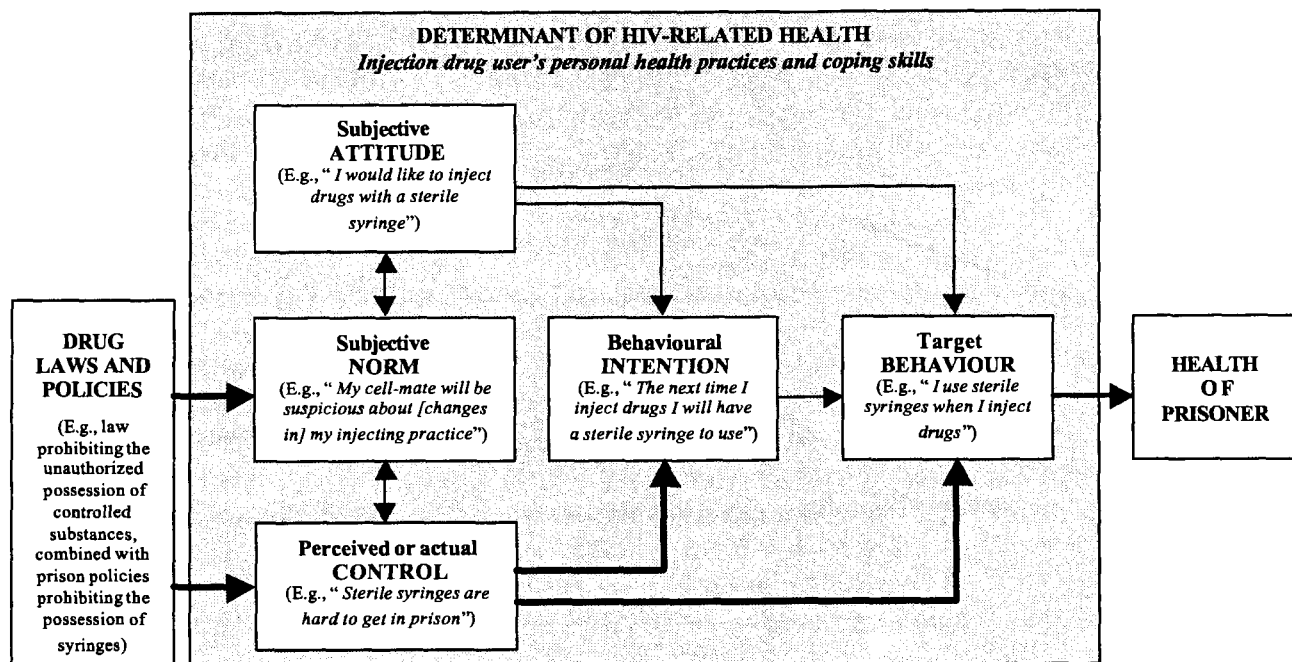
Notes: A law prohibiting the possession of controlled substances, and applied so as to impose incarceration as a chief penalty, increases the number of drug users for whom prison is their *physical environment*. The prohibition on possession of illicit drugs has a further, direct effect on the *physical environment* for injection drug users in prison, in that it creates physical conditions requiring rapid, clandestine use of those drugs. The law therefore affects the determinant of health that is *physical environment* in at least these two ways.

Both drug laws and policies may incorporate drug- or AIDS-related stigma directed at those vulnerable to or living with HIV/AIDS. This stigmatization, in turn, may have an indirect effect on the *social environment* of prisoners.

Institutional policies prohibiting syringes in prison as contraband compound the health effects by influencing at least two other health determinants: the prohibition has a direct effect on *health services* for prisoners who inject drugs (i.e., denying or hindering access to sterile injection equipment), which has a direct impact on *personal health practices* (i.e., sharing injection equipment). In this example, through a variety of direct and indirect means, law/policy has a negative impact on the health of prisoners because it heightens their vulnerability to HIV infection. Healthy public policy aimed at facilitating HIV prevention would change this.

Furthermore, the fact that the law has imposed prison as the *physical environment* for drug users often has a further ripple effect on the determinant that is *health services*: e.g., as a result of their imprisonment, prisoners will often experience limited access to specialist care for treating HIV disease and related conditions, interruptions in their regimen of medications (e.g., for anti-retroviral drugs), inadequate diet necessary to maintain health (particularly if their HIV medication regimen is accompanied by specific dietary requirements), little or no access to psycho-social support services, etc. Access (or lack thereof) to health services then has an impact on both the progression of HIV disease and the broader ability of the individual to cope/live with HIV/AIDS.

Figure D: How Law and Policy affects “Personal health practices and coping skills”



Notes: The determinant of health *Personal Health Practices and Coping Skills* refer to those actions or behaviours by which individuals can prevent diseases and promote self-care, cope with challenges, develop self-reliance, solve problems and make choices that enhance health.⁶² Personal health practices include the influences of individual factors and of structural factors such as laws/policies on the decisions people make about their health. The use of sterile syringes as a safer injection practice is considered here as a personal health practice of injection drug users that reduces the risks of acquiring or transmitting HIV.

Azjen's theory of planned behaviour is applied as the framework for behaviour change at the individual level. The theory assumes that behaviour change is predicted by: (1) people's intention to change behaviour, (2) their attitude toward the behaviour, (3) how they believe others view the behaviour, and (4) their perceptions of the control they have over enacting the behaviour (this control includes actual physical barriers to making the behaviour change and perceptions of self-efficacy or competence in making the behaviour change). Here the theory allows the detailing of how drug laws/policies operate to affect health: the legal and policy environment influences a prisoner's behavioural "choices".⁶³

Drug laws/policies directly affect perceived or actual control towards safer drug use. If one considers the existence of a policy prohibiting the possession of syringes in prisons, clearly prisoners face greater difficulty in achieving the target personal health practice of using sterile syringes. In other words, if the person perceives little or no control in accessing sterile syringes in prison, this will negatively affect the intention to use a sterile syringe (i.e., behavioural intention and the actual use of a clean needle (i.e. target behaviour). Structural interventions would support the creation of a law/policy environment that enhances rather than deters the capacity of individuals to make healthy lifestyle choices in a prison context.⁶⁴

⁶² Information at: www.hc-sc.gc.ca/hppb/phdd/determinants/e_determinants.html#personalhealth

⁶³ See: Azjen I. From Intention to Actions: A Theory of Planned Behavior, in Kuhl J, Beckmann J (eds). *Action-Control: From Cognition to Behavior*. Heidelberg: Springer, 1985: at 11-39; and Prediction of Goal-Directed Behavior: Attitudes, Intentions, and Perceived Behavior Control. *Journal of Experimental Social Psychology* 1986; 7: 259-276.

⁶⁴ For a useful application of this model on the impact of using criminal to prevent HIV transmission or exposure, see: Lazzarini Z et al. Evaluating the impact of Criminal Laws on HIV Risk Behavior. *Journal of Law, Medicine and Ethics* 2002; 30: 239-253.

Section III: Literature on Impact of Law/Policy in Specific HIV/AIDS-related Areas

This section provides a review of literature assessing the impact of law/policy on health determinants in four specific areas related to HIV/AIDS. For each area, the review first outlines the theoretical impact of various structural legal and policy factors associated with HIV/AIDS, then summarizes quantitative and qualitative studies that illustrate the connections between structural factors and the impact on health.

3.1 Laws and Policies Regarding HIV Testing, Reporting and Partner Notification

3.1.1 Theoretical literature

In the area of HIV testing policies, most of the literature reviewed recommends that policy-making should not dismiss the importance of respecting people's rights and the risk of discrimination, and suggests it would be imprudent to implement coercive measures. This may be particularly the case when the efficacy of coercive strategies is at best questionable. Testing policy generally, and in pregnancy and aboriginal settings in particular, is believed to require constant re-evaluation as treatments and technology evolve.^{65, 66, 67} A careful consideration of risks and benefits that takes account of an individual's human rights and society's need to maintain public health is understood as the appropriate basis of ethical legal and policy approaches to HIV testing.⁶⁸ In addition, the literature recognizes that new testing technologies, new treatments and the availability of post-exposure prophylaxis constitute a huge step forward but do not represent a solution to all problems faced by people living with HIV/AIDS, such as the problems that stem from gender inequities, poverty and discrimination.^{69, 70} Specifically, these advances do not automatically signify that HIV testing policies must change or that principles such as informed consent become less important touchstones for HIV-related law/policy.

Another view holds that the reasons why many people at risk of HIV infection are not tested may have more to do with the "social risk of being tested" (e.g., that there will be a cost for the test, or that serostatus will have to be disclosed), rather than with fear of discrimination and stigma *per*

⁶⁵ Stoltz L, Shap L. *HIV Testing and Pregnancy: Medical and Legal Parameters of the Policy Debate*. Ottawa: Health Canada, 1999.

⁶⁶ Matiation S. *HIV Testing and Confidentiality: Issues for the Aboriginal Community* (2nd Edition). Canadian HIV/AIDS Legal Network, Canadian Aboriginal AIDS Network, 1999. Available at: <http://www.aidslaw.ca/Maincontent/issues/aboriginals/finalreports/confabo/e-testing.pdf>

⁶⁷ Tseng AL. Anonymous HIV Testing in the Canadian Aboriginal Population. *Canadian Family Physician* 1996; 42: 1734-1740.

⁶⁸ Jürgens R. *HIV Testing and Confidentiality: Final Report* (2nd Edition). Montreal: Canadian HIV/AIDS Legal Network, 2001. Available at: <http://www.aidslaw.ca/Maincontent/issues/testing/00cover.html>

⁶⁹ Elliott R, Jürgens R. *Rapid HIV Screening at the Point of Care: Legal and Ethical Questions*. Montreal: Canadian HIV/AIDS Legal Network, 1999. Available at: <http://www.aidslaw.ca/Maincontent/issues/testing/finalreports/tofc.htm>

⁷⁰ Lert F. Advances in HIV Treatment and Prevention: Should Treatment Optimism Lead to Prevention Pessimism? *AIDS Care*. 2000; 12(6): 745-55.

se.⁷¹ While confirming the need to address HIV-related discrimination and stigma through legal and other means, this view suggests that researchers should use richer models of enquiry to more fully understanding the reasons why people at risk of acquiring HIV will not get tested.

Analysis of the theoretical impact of HIV testing policies suggests that while early detection of HIV infection is a pressing priority, making HIV testing routine or mandatory needs to be treated with great caution. There is a lack of consensus regarding whether mandatory/compulsory testing, at least for certain populations or in certain circumstances, is to be favoured over voluntary testing. However, by far the predominant view is that voluntary testing is preferred over mandatory or compulsory testing. There is some support for compulsory testing in populations that are at high risk of HIV (e.g., sex workers). Proponents argue that this measure would allow health care providers to intervene early and control the spread of the disease. For example, one author argued that in US prison settings, compulsory testing is an important means of reducing the impact of the spread of the virus both within prison and in the non-offender population.⁷²

Regarding the issue of anonymous testing, some argue that this is the best HIV testing option, because it ensures patient confidentiality and thus encourages individuals to undergo testing.^{73, 74} These authors suggest that reluctance to be tested could be attributed to lack of access to anonymous testing sites, language barriers, cultural nuances or preference for traditional healing options, as well as to the difficulty of maintaining confidentiality in small communities, and fear of negative consequences of HIV testing.

For others, there is no clear-cut “best testing option” if one considers variations in policy options from one country to another. One article compared policies on nominal HIV testing in Britain, Hungary and Sweden, and considered the extent to which these policies are based on evidence of their effectiveness in encouraging testing or on other, contextual, factors.⁷⁵ The authors contrasted the British legal/policy environment, where the “right not to know” one’s HIV status is widely respected, with the environment in Hungary and Sweden, where the “responsibility to find out” is more pervasive. Although policy makers in all three countries appear convinced that theirs is the right approach, the authors suggest that there appears to be a dearth of convincing evidence to support either anonymous or nominal testing as the necessarily better option.

The debate concerning the most appropriate testing policy extends to discussions about partner notification and reporting of HIV seropositivity. Most analyses agree that one of the guiding

⁷¹ Burris S. Driving the Epidemic Underground? A New Look at Law and the Social Risk of HIV Testing. *AIDS and Public Policy Journal*. 1997; 12(2 Summer): 66-78.

⁷² Amankwaa AA et al. Revisiting the Debate of Voluntary Versus Mandatory HIV/AIDS Testing in US Prisons. *Journal of Health & Human Services Administration* 1999; 22(2): 220-36.

⁷³ Jürgens R. *HIV Testing and Confidentiality: Final Report* (2nd Edition). Montreal: Canadian HIV/AIDS Legal Network, 2001.

⁷⁴ Matiation S. *HIV Testing and Confidentiality: Issues for the Aboriginal Community* (2nd Edition). Canadian HIV/AIDS Legal Network, Canadian Aboriginal AIDS Network, 1999.

⁷⁵ Danziger R. HIV testing for HIV prevention: A Comparative Analysis of Policies in Britain, Hungary and Sweden. *AIDS Care* 1998; 10 (5): 563-70.

principles for partner notification should be voluntary participation.^{76, 77} The consequences of partner notification, however, are complex and may not be uniformly beneficial to infected persons, their partners or the community. One author argues that partner notification has demonstrable flaws because it infringes on civil liberties: “Partner notification presents a cost to individuals in loss of privacy and in discrimination. For women, it can result in abandonment, neglect, and abuse. For these reasons, alternative strategies like social network analysis should be considered to supplement or replace partner notification.”⁷⁸

The rationale for why HIV should or should not be reportable is often based on the benefits and problems associated with partner notification. The common objection to making HIV reportable by name is that this will cause individuals who could benefit from testing to avoid testing. However, the literature is inadequate to make firm conclusions on this point. Close analysis of individuals’ willingness to test in the US indicates that many people who seek HIV testing are unaware of whether HIV is reportable where they live.^{79, 80} Fear of receiving a positive diagnosis is deemed a much greater deterrent to testing than the reportability status of HIV. However, the extent to which reportability (and the method of reporting) affects willingness to test has not been studied carefully.

In the US, the Centers for Disease Control and Prevention, mainstream medical journals and many state legislatures have supported state-level proposals that require public health officials to adopt named reporting of HIV test results instead of reporting using number identification that ensures anonymity.^{81, 82, 83, 84} US literature reports that even name-based surveillance does not directly deter individuals at risk of HIV from being tested, or expose them to significant social risks. Theoretically, rather than focusing piecemeal on specific barriers to testing and care, an appreciation of the surveillance debate *in context* recommends “a positive undertaking in public health policy to provide the conditions of opportunity, information, motivation and confidence that people with HIV need to accept an effective program of early intervention.”⁸⁵

⁷⁶ Federal/Provincial/Territorial Advisory Committee on AIDS Working Group on Partner Notification. *Guidelines for Practice of Partner Notification in HIV/AIDS*, January 1997.

⁷⁷ Dimas JT, Richland JH. Partner Notification and HIV Infection: Misconceptions and Recommendations. *AIDS & Public Policy Journal* 1989; 4 (4): 206-211.

⁷⁸ Gostin LO, Hodge JG. Piercing the Veil of Secrecy in HIV/AIDS and Other Sexually Transmitted Diseases: Theories of Privacy and Disclosure in Partner Notification. *Duke Journal of Gender Law Policy*. 1998; 5: at 87-88.

⁷⁹ Fleming, PL et al. Guidelines for National Human Immunodeficiency Virus Case Surveillance, Including Monitoring for Human Immunodeficiency Virus Infection and Acquired Immunodeficiency Syndrome. *Mortality and Morbidity Weekly Report*. December 10, 1999; 48 (RR13); 1-28.

⁸⁰ — New Treatments Give HIV Reporting Added Weight. *AIDS Alert*. July 1997; 80-83.

⁸¹ For an excellent review of this literature, see: Beckerman NL, Gelman SR. A Shift in HIV Reporting Practices: A Biopolitical Analysis. *Journal of Health & Social Policy* 2000; 12(2): 73-87. See also: Gostin 1997 (supra).

⁸² Grumman C. Activists Speak Out on HIV Reporting: Confidentiality Seen as a Problem. *The Illinois Times*, 28 April 1998: C2.

⁸³ Richardson L. AIDS Group Opposes Use of Names in HIV Reports. *The New York Times*, 17 January 1998: B6.

⁸⁴ Valdiserri RO. et al. The Context of HIV/AIDS Surveillance. *Journal of Acquired Immune Deficiency Syndromes*. 2000; 25 (Suppl. 2): S97-104.

⁸⁵ Burris S. Surveillance, Social Risk, and Symbolism: Framing the Analysis for Research and Policy. *Journal of Acquired Immune Deficiency Syndrome* 2000; 25(Suppl 2): S120-127.

Conversely, one US author recommends that a determination should be made as to whether the potential long-term benefits of name-based reporting outweigh the risks before the practice of nominal reporting is more widely adopted.⁸⁶

Considering that most jurisdictions in Canada have adopted laws requiring name-based reporting of cases of HIV seropositivity, and in light of the theoretical implications regarding various testing options and debate over data collection, research on the impact of such change in public health law/policy is needed. In Quebec, for instance, these changes have occurred and, although the individual's name will not be transmitted from the public health laboratory to the health ministry's list of data, there is concern within AIDS service organizations that the new policy may compromise the anonymity and confidentiality of people living with HIV, as well as generate a false sense of security in the general public.⁸⁷

3.1.2 Empirical data

Empirical assessments of the impacts of HIV testing policy are available. They explore primarily: the test experience and confidentiality; stigma and the social risks of testing; testing approaches; and policy regarding HIV testing of pregnant women.

A study on HIV testing in Ontario specifically explored the reality of HIV test counselling and evaluated the impact of those counselling efforts so as to inform the development of HIV counselling programs and policies.⁸⁸ The investigators included both HIV test providers and recipients in their qualitative interview scheme. Test providers included physicians, none of whom reported having any formal training in HIV/AIDS. A number of test recipients acknowledged social risks of being tested. They universally valued confidentiality in testing and preferred anonymous testing settings. The findings led to a series of recommendations to improve and enhance: the pre-test encounter between test providers and recipients; the period waiting for test results; the post-test encounter; HIV testing guidelines; education, training and support for test providers; and future research into the process of testing. The study suggested that HIV/AIDS continues to raise many issues that relate to stigmatization. To maintain and improve the effectiveness of the test as a prevention and treatment intervention, it is important to continue to evaluate the impact of the HIV test on recipients and providers, as well as to understand the impact of systemic changes in societal attitudes, policies and laws.

A second study on the experiences of persons living with HIV in rural areas in North Carolina demonstrated the importance of developing appropriate policies and procedures regarding confidentiality.⁸⁹ This study was not specifically about HIV testing but on the issue of confidentiality in general, with likely applications for HIV testing policy. Most respondents had

⁸⁶ Colfax GN, Bindman AB. Health Benefits and Risks of Reporting HIV-Infected Individuals by Name. *American Journal of Public Health*. 1998; 88(6): 876-87.

⁸⁷ Paré I, Dutrisac R. Santé publique: Le VIH sera une maladie à déclaration obligatoire. L'anonymat des personnes porteuses sera protégé, *Le Devoir*, 19 September 2001.

⁸⁸ Myers T et al. *The HIV Test Experience Study: An Analysis of Test Providers' and Test Recipients' Descriptions and Critical Appraisals of the HIV Antibody Test Experience*. Toronto: University of Toronto, 1998.

⁸⁹ Whetten-Goldstein K et al. So much for Keeping Secrets: The Importance of Considering Patient's Perspectives on Maintaining Confidentiality. *AIDS Care* 2001; 13(4): 457-466.

experienced or knew someone who had experienced a breach in confidentiality – either obvious breaches (e.g., a nurse tells her child that her patient was HIV-positive out of concern that her child would play with the patient’s child) or more subtle breaches (e.g., a health care provider releasing a patient’s HIV status to other providers without the patient’s consent). Interestingly, respondents claimed to make decisions about where to seek care based on the degree of professionalism of medical staff (which included respecting confidentiality), clinic location and level of security of the organization’s computer network, since they believed that computers increased information access. Confidentiality policies should require health care providers to: explain procedures for sharing information; request patients’ specific consent for access to their medical records, even among other providers; and punish those who breach confidentiality.

Stigma and the social risks of testing

On the social risks of testing, some research has focused on AIDS-related stigma, negative public attitudes towards people living with HIV/AIDS and the impact of such stigmatization. Of particular relevance here is one US study which found that stigma surrounding sexually transmitted diseases is a very powerful barrier to obtaining care.⁹⁰ The researchers concluded that increasing knowledge or health care access may not address the barriers posed by stigmatization. Alternatively, they argued that what was needed were structural interventions that acknowledge societal attitudes regarding sexual behaviours and perceived negative judgments of those with STDs. These findings are consistent with widely held assumptions about the role of stigma as a barrier to HIV prevention and care.

In addition, several researchers have found that fear of stigma deters individuals from being tested for HIV and from disclosing their seropositive status to sexual partners, family and friends. One study examined the ways in which AIDS-related stigma is associated with psychological distress and can delay testing.⁹¹ Findings also suggest that stigma affected people with HIV/AIDS in terms of their decisions to disclose HIV serostatus to physicians, family and friends, and to entering and adhering to care. Another study found that the reasons why individuals who do not disclose information about being HIV seropositive are related to the desire to maintain privacy and, therefore, to control who has access to the information about the diagnosis.⁹² Two other US studies looked at rates of disclosure in ethnically diverse samples of HIV-positive women. Findings suggested that women were very likely to avoid disclosing their seropositivity because of perceived AIDS-related stigma. In particular, stigma deterred disclosure in women from Spanish-speaking Latina communities⁹³ as well as in women who feared partner violence.⁹⁴ These

⁹⁰ Fortenberry JD et al. Relationships of Stigma and Shame to Gonorrhea and HIV Screening. *American Journal of Public Health* 2002; 92: 378-381.

⁹¹ Chesney MA, Smith AW. Critical Delays in HIV Testing and Care: The Potential Role of Stigma. *American Behavioral Scientist* 1999; 42:1162-1174.

⁹² Derlega VJ et al. “Personal Accounts on Disclosing and Concealing HIV-Positive Test Results: Weighing the Benefits and Risks.” In: Derlega VJ, Barbee AP (eds). *HIV and Social Interaction*. Thousand Oaks, CA: Sage, 1998: at 147-164.

⁹³ Simoni JM et al. Women’s Self-Disclosure of HIV Infection: Rates, Reasons, and Reactions. *Journal of Consulting and Clinical Psychology* 1995; 63: 474-478.

⁹⁴ Gielen AC et al. Women’s Disclosure of HIV Status: Experiences of Mistreatment and Violence in an Urban Setting. *Women Health* 1997; 25: 19-31.

data support the idea that, if incorporated in law/policy, stigmatization will have substantial indirect HIV-related effects on health.

Anonymity and Confidentiality of Testing

On the subject of HIV testing approaches, one study compared patterns of anonymous and confidential testing in all US federally funded counselling and voluntary testing programs from 1995 through 1997.⁹⁵ This study documented the importance of both types of testing opportunities. Findings suggest that the decline in anonymous testing may reflect the perceived positive impact of new laws and regulations on decreasing the risk of confidentiality violations. The CDC concluded that because of the potential benefits of anonymous testing, it would encourage states to include anonymous testing as an integral component of HIV testing and counselling programs.

Similarly, two studies examined the impact of the closing of anonymous test sites in North Carolina. The first found that HIV testing increased more rapidly in counties that maintained anonymous testing compared to counties that did not.⁹⁶ The second concluded that while eliminating anonymous testing had a relatively small effect on rates of HIV testing and on partner notification, it had a large effect on the relationship between the advocacy community and the public health department.⁹⁷ Together these data suggest that a policy that encourages confidential testing while maintaining the availability of anonymous testing may maximize the effectiveness of both testing and partner notification, as well as fostering healthier relationships between communities and public health. In addition, the acceptability of confidential testing could be enhanced by policies using unique identifiers, as opposed to names, for HIV reporting, and the strengthening of anti-discrimination policies and laws.

HIV test reporting policy

US literature on the subject of HIV/AIDS surveillance systems and the issues raised by nominal reporting of HIV seropositivity suggests that there is little evidence that name-based surveillance directly deters individuals at risk of HIV from being tested, or exposes them to significant social risks.⁹⁸ A common objection to making HIV reportable is that this will cause individuals who could benefit from testing to avoid testing. However, this claim is not substantiated in the

⁹⁵ CDC "Anonymous or Confidential HIV Counseling and Voluntary Testing in Federally Funded Testing Sites: United States, 1995-1997", *Morbidity and Mortality Weekly Report* 1999 (June 25); 48(24): 509-513.

⁹⁶ Hertz-Picciotto I, Lee L, Hoyo C "HIV Test-Seeking Before and After the Restriction of Anonymous Testing in North Carolina, USA", *American Journal of Public Health* 1996; 86 (10): 1446-1449.

⁹⁷ Kassler WJ et al. Eliminating access to anonymous HIV antibody testing in North Carolina: effects on HIV testing and partner notification. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1997; 14(3): 281-289.

⁹⁸ Fleming, PL et al. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. *Mortality and Morbidity Weekly Report* 1999; 48 (RR13):1-28. This document is the US Centers for Disease Control's guidelines for surveillance of HIV and AIDS. It recommends that all US States extend their current AIDS surveillance activities to include HIV. The Guidelines include an important section on the effect of making HIV nominally reportable and the evidence about testing behaviours. There is no strong evidence that people would not be tested simply because HIV is reportable.

literature. In fact, the evidence indicates that many people who seek HIV testing do not know whether HIV is reportable in their jurisdiction. For example, one study used the counselling and testing data from six state health departments (Louisiana, Michigan, Nebraska, Nevada, New Jersey and Tennessee) to compare HIV testing and counselling rates 12 months before and 12 months after HIV nominal reporting was introduced.⁹⁹ The results found that no significant declines in the total number of HIV tests occurred in the months following implementation of nominal reporting of HIV test results (other than those expected trends present before HIV reporting).

Partner notification policy

Another important finding first published more than a decade ago is that generally most index patients are willing to participate in partner notification programs if their anonymity can be guaranteed.¹⁰⁰ A 1989 study of 25 HIV-positive women in New Jersey showed that 68% of the participants were willing to give the names of their sexual partners to the health department as long as confidentiality was maintained. Alternatively, 20% of the women would agree to partner notification if their names were disclosed to the partner. Similarly, in 1999, a survey of persons who tested positive for HIV before the date of their AIDS diagnosis in five US states with name-based surveillance found that persons who were tested anonymously and those who were tested confidentially did not differ in the mean number of sex and needle-sharing partners notified, nor was health department follow-up of a reported HIV infection associated with more timely receipt of medical care after a positive HIV test result.¹⁰¹ These results suggest that the potential for positive or negative effects of name-based surveillance of HIV infection on partner notification and on access to health care may have been exaggerated, and that other factors may be more significant.

The bulk of other empirical data reviewed in the area of testing policies included a large number of studies outside Canada that examined HIV testing options in pregnancy.^{102, 103, 104, 105} In general, this literature reveals that testing policies which combine universal counselling with voluntary testing impact positively on pregnant women's willingness to test.

⁹⁹ Nakashima AK et al. Effect of HIV Reporting by Name on Use of HIV Testing in Publicly Funded Counseling and Testing Programs. *Journal of the American Medical Association* 1998; 280: 1421-1426.

¹⁰⁰ Chevernak JL, Weiss SH. Sexual Partner Notification: Attitudes and Actions of HIV-Infected Women. 5th *International Conference on AIDS*. Montreal, June 1989; abstract DP4.

¹⁰¹ Osmond DH et al. Name-based surveillance and public health interventions for persons with HIV infection. Multistate Evaluation of Surveillance for HIV Study Group. *Annals of Internal Medicine* 1999; 131(10): 775-9.

¹⁰² Rey D et al. Mandatory Prenatal Screening for Human Immunodeficiency Virus: The Experience in South-Eastern France of a National Policy, 1992-1994. *British Journal of Obstetrics and Gynaecology* 1998; 105(3): 269-274.

¹⁰³ Bergstrom A, Sherr L. A Review of HIV Testing Policies and Procedures For Pregnant Women in Public Maternity Units of Porto Alegre, Rio Grande do Sul, Brazil. *AIDS Care* 2000; 12(2): 177-86.

¹⁰⁴ McNeeley DF et al. Newborn Screening for Human Immunodeficiency Virus Infection in the Bronx, NY, and Evolving Public Health Policy. *American Journal of Perinatology* 1999; 16(10): 503-7.

¹⁰⁵ Royce RZ et al. Barriers to Universal Prenatal HIV Testing in 4 US Locations in 1997. *American Journal of Public Health* 2001; 91(5): 727-733.

3.2 Drug Laws and Policies

3.2.1 Theoretical literature

The theoretical impact of drug legislation and policies on health and human rights has been extensively addressed.^{106, 107, 108, 109, 110, 111, 112} Some literature exists regarding the negative impact of laws prohibiting the unauthorized possession of certain drugs on access to HIV prevention and care in people who inject drugs. Specific laws/policies have been the focus of these analyses (e.g., restrictions in the sale, distribution or possession of syringes) while others have not been studied (e.g., welfare laws/policies). Similarly, there exists evidence of the positive health impact of harm reduction interventions, such as the implementation of needle exchange programs. Theoretical literature takes issue with the pervasive structuring effects of drug laws/policies on the HIV epidemic associated with injection drug use, and argues that this epidemic can be slowed, stopped or even reversed by the removal of laws/policies that criminalize drug use and thereby impede HIV prevention and access to care, treatment and support for drug users.

Historical analyses of drug laws, regulations and policies in Canada and the US bring attention to institutional, professional and political determinants of health and addiction, and argue that drug laws/policies should be considered direct structural barriers to or facilitators of HIV prevention and care.^{113, 114, 115, 116} Their effect is closely linked to specific behaviours, such as when they influence the availability of legal and accessible HIV prevention services (e.g., access to sterile

¹⁰⁶ Canadian HIV/AIDS Legal Network. *Injection Drug Use and HIV/AIDS: Legal and Ethical Issues*. Montreal: The Network, 1999. Available at: <http://www.aidslaw.ca/Maincontent/issues/druglaws.htm>

¹⁰⁷ Gilmore N. Drug Use and Human Rights: Privacy, Vulnerability, Disability and Human Rights Infringements. *Journal of Contemporary Health Law and Policy* 1996; 12: 355-448. Available at: www.drugtext.org/books/gilmore/gilmcont.htm

¹⁰⁸ Hilton BA et al. Harm reduction theories and strategies for control of human immunodeficiency virus: a review of the literature. *Journal of Advanced Nursing* 2001; 33(3): 357-70.

¹⁰⁹ Kirby M. Sex, Drugs and the Family. [Australian] *National AIDS Bulletin* 1994; 7(12): 20-22.

¹¹⁰ Oscapella E. *Le Dain* Revisited: 21 Years Later. *Lawyers Weekly* 1995; 14 (35): 5.

¹¹¹ Riley D, Oscapella E. Bill C-7: Implications for HIV/AIDS Prevention. *Canadian HIV/AIDS Policy & Law Review* 1995; 1 (2): 11-13.

¹¹² Stimson GV et al (eds). *Drug Injecting and HIV Infection: Global Dimensions and Local Responses*. London: Taylor & Francis, 1998.

¹¹³ Fischer B. Prescriptions, Power and Politics: The Turbulent History of Methadone Maintenance in Canada. *Journal of Public Health Policy* 2000; 21(2): 187-210.

¹¹⁴ Fischer B. "The Battle for a New Canadian Drug Law: A Legal Basis for Harm Reduction or a New Rhetoric for Prohibition? A Chronology", in *Harm Reduction: A New Direction for Drug Policies and Programs* (P Erickson et al, eds). Toronto: University of Toronto Press, 1997.

¹¹⁵ Hadaway P, BL Beyerstein, JVM Youdale. Canadian drug policies: irrational, futile and unjust. *Journal of Drug Issues* 1991; 21(2): 183-197.

¹¹⁶ Oscapella E. Witch Hunts and Chemical McCarthyism: The Criminal Law and Twentieth-Century. In P Basham (Ed.) *Sensible Solutions to the Urban Drug Problem*. Vancouver: The Fraser Institute, August 2001. Available at: www.fraserinstitute.ca.

injection equipment to reduce the likelihood of infection) or willingness to access care, treatment or support services that impose abstinence from drug use as a requirement.^{117, 118}

For example, one national survey of laws and regulations governing the sale and possession of needles and syringes in the US discussed legal and public health proposals to increase the availability of sterile syringes, as a measure to prevent HIV for persons who continue to inject drugs.¹¹⁹ The analysis revealed that:

To the extent that these laws, regulations, and ordinances restrict access to sterile syringes, they contribute to the spread of blood-borne diseases among IDUs, their sexual contacts, and their children. In addition, because of criminal and professional sanctions, they deter pharmacists, physicians, and public health professionals from providing important HIV prevention services to persons who continue to inject drugs.¹²⁰

According to these authors, laws/policies that penalize the possession of syringes are problematic for a number of reasons: (1) drug users who are arrested on a drug paraphernalia charge are subject to fines and possible incarceration; (2) possession itself marks the person as a drug user and may subject him or her to more intense police surveillance; (3) once an individual is found to possess drug paraphernalia, he or she is more likely to undergo a police search for illicit drugs;¹²¹ (4) the threat of arrest and prosecution for possession of drug injection equipment makes it less likely that active IDUs will carry, and hence use, sterile syringes. The authors suggest that deregulation of syringe sale and possession would reduce morbidity and mortality associated with blood-borne disease among IDUs, and could be implemented without harmful social repercussions as one component of a comprehensive, well-financed strategy to impede the dual epidemics of drug use and HIV/AIDS.

In addition, while drug laws/policies directly affect the behaviour of a segment of society by criminalizing drug-related activities, they have a more indirect impact on the general population. Stigmatization and marginalization of criminalized behaviours and of drug users in general can therefore be understood as an indirect structural barrier to HIV prevention and care:

First, we sentence drug users to prison; then we do not give them the means to prevent HIV infection from the high levels of drug-use in prisons. Not until recently did we make condoms available to prisoners, in part out of fear that condoms would be used to hide drugs. Still, despite finally acknowledging that drug use in prisons is widespread, we have refused to help prisoners with some of the essential means that are available outside

¹¹⁷ Des Jarlais DC. Structural Interventions to Reduce HIV Transmission Among Injection Drug Users. *AIDS* 2000; 14 (Suppl 1): S41-46.

¹¹⁸ Taussig JA et al. Syringe Laws and Pharmacy Regulations are Structural Constraints on HIV Prevention in the US. *AIDS* 2000; 14 (Suppl 1): S47-51.

¹¹⁹ Gostin LO, Lazzarini Z, Jones TS, et al. Prevention of HIV/AIDS and other blood-borne diseases among injection drug users: a national survey on the regulation of syringes and needles. *Journal of the American Medical Association* 1997; 277: 53-62.

¹²⁰ Ibid.

¹²¹ In the US, discovery of a syringe, or even bleach, may provide probable cause under the Fourth Amendment to conduct a broader search of the drug user and his or her possessions, leading to confiscation of illicit drugs and prosecution for sale or use. [See Gostin LO, Lazzarini Z, Jones TS, et al., 1997, op. cit.]

prisons to prevent the spread of blood-borne diseases. [Society] cares little about HIV infection among drug users and prisoners because it had been taught to care little for drug users and prisoners themselves.¹²²

The literature generally recommends that drug use be dealt with as a health issue, not a criminal issue, in part because the legal status of drugs in Canada contributes to the difficulty of addressing HIV among people who inject drugs. For example, one author points out: "It is only by separating drug use from drug prohibition that one is able to assess whether or not the harmful side effects of prohibition overwhelm the benefits of supposed lower drug consumption and the resulting lower social costs."¹²³ Similarly, the International Harm Reduction Development Program reports that providing IDUs with sterile needles, condoms and safer sex information is less costly for a society's overall health and welfare than treating a person with AIDS.¹²⁴ In addition, it is argued that the HIV epidemic associated with injection drug use can be slowed or even reversed by providing IDUs with HIV prevention education and distributing sterile injection equipment widely.

An in-depth examination of the legal and ethical issues surrounding HIV/AIDS and injection drug use in Canada suggests the need for major long-term changes to drug legislation and policies, and recommends that complete, honest and non-judgmental information on drugs be accessible and widely distributed, that correctional systems make sterile needles available to inmates, and, in general, that a repressive, prohibitionist approach make way for approaches premised on harm reduction.¹²⁵

One harm reduction initiative that is well documented is needle exchange programs. Analyses look at needle exchange programs in various stages of development, and identify these as a useful medical, social, economic and political intervention to decrease rates of HIV transmission in IDUs.^{126, 127, 128, 129} Needle exchange is considered one component of a comprehensive program that should also include counselling, support and education. It has been suggested that rules and practices surrounding needle exchange in Canada, particularly in Vancouver (such as one-for-one

¹²² Oscapella E. 2001, op. cit.

¹²³ Basham P. Re-evaluating the 'War on Drugs'. In his *Sensible Solutions to the Urban Drug Problem*, The Fraser Institute, 2001. Available at: www.fraserinstitute.ca

¹²⁴ International Harm Reduction Development Program. *Drug, AIDS, and Harm Reduction: How to Slow the HIV Epidemic in Eastern Europe and the Former Soviet Union*. Open Society Institute, 2001. Available at: www.soros.org/harm-reduction/

¹²⁵ Canadian HIV/AIDS Legal Network. *Injection Drug Use and HIV/AIDS: Legal and Ethical Issues*. Montreal: The Network, 1999.

¹²⁶ Bruneau J et al. High Rates of HIV Infection Among Injection Drug Users Participating in Needle Exchange Programs in Montreal: Results of a Cohort Study. *American Journal of Epidemiology* 1997; 146(12): 994-1006.

¹²⁷ Coleman LJ, Stenlund KJ. Marketing Syringe/Needle Exchange Programs. *Health Marketing Quarterly* 1999; 17(2): 67-73.

¹²⁸ Clark PA. The Ethics of Needle exchange Programs. *AIDS & Public Policy Journal* 1998; 13(4): 131-139.

¹²⁹ Taussig JA et al. Syringe Laws and Pharmacy Regulations are Structural Constraints on HIV Prevention in the US. *AIDS* 2000; 14 Suppl 1: S47-51.

exchanges, quota limitations, needle exchange service locations and hours of operation) create significant barriers to the use of these programs.^{130, 131, 132}

Other harm reduction initiatives that have been the focus of theoretical discussions include the establishment of safe injection facilities, which have been used successfully in Switzerland, Germany, the Netherlands, Spain and, most recently, at a trial facility in Australia,^{133, 134} and proposals for and in some cases experiments with heroin maintenance.¹³⁵

3.2.2 Empirical data

Much theoretical literature exists regarding the negative impact criminalization of drug use has on access to HIV prevention and care for people who inject drugs. Complementing the extensive theoretical analysis, empirical assessments have examined factors that facilitate the vulnerability to HIV of people who inject drugs, as well as the positive impact of harm reduction programs and policies. Empirical literature confirms that many of the serious problems we associate with illegal drug use are caused directly or indirectly, not by drug use itself, but by drug prohibition. Drug laws/policies are thus important structural determinants of health.

The vulnerability of IDUs to HIV is well documented empirically. For example, one study found that social determinants of health, such as a history of sexual abuse, were among the strongest predictors of needle-sharing activity among Vancouver's drug using community.¹³⁶ Another qualitative study examined the biographic and pre-dispositional determinants of HIV preventive behaviours in IDUs, including avoiding sharing injection equipment and using condoms.¹³⁷ Results indicate that a predisposition not to share injection equipment correlates with safer injection drug use and condom use. Needle exchange programs that target only one HIV preventive behaviour rather than both (avoiding sharing injection equipment and using condoms) would seem to be inadequate. To enhance targeted interventions, the study recommends changes in public and agency policy to create a social environment conducive to behaviour change. Also, in a Toronto study of untreated opiate addicts, 41% of the respondents reported having experienced at least one incident in the previous 12 months in which they thought they needed

¹³⁰ Strathdee S et al. Needle exchange is not enough: lessons from the Vancouver injecting drug use study. *AIDS* 1997; 11(8): F59-65.

¹³¹ Hankins C. Syringe exchange in Canada: good but not enough to stem the HIV tide. *Substance Use and Misuse* 1998; 33: 1129.

¹³² Schechter MT et al. Do Needle Exchange Programmes Increase the Spread of HIV Among Injection Drug Users? An Investigation of the Vancouver Outbreak. *AIDS* 1999; 13: F45-51.

¹³³ Elliott R, Malkin I, Gold J. *Establishing Safe Injection Facilities in Canada: Legal and Ethical Issues*. Montreal: Canadian HIV/AIDS Legal Network, 2002.

¹³⁴ Kerr T. *Safe Injection Facilities: Proposal for a Vancouver Pilot Project*. Prepared for the Harm Reduction Action Society. Vancouver, 2000.

¹³⁵ Fischer B. The Case For a Heroin Substitution Treatment Trial in Canada. *Canadian Journal of Public Health* 1997; 88: 367.

¹³⁶ Strathdee SA et al. Social Determinants Predict Needle-Sharing Behaviour among Injection Drug Users in Vancouver Canada. *Addictions* 1997, 92(10): 1339-47.

¹³⁷ Myers T et al. A Comparison of the Determinants of Safe Injecting and Condom Use Among Injecting Drug Users. *Addictions* 1995; 90(2): 217-26.

medical assistance but in the end did not seek it.¹³⁸ Barriers to seeking medical care may include a non-conducive environment created by law enforcement in areas where drug use is common. Research in Vancouver has identified structural barriers to HIV prevention among IDUs, such as substandard housing, limited access to addiction services, ever diminishing socio-economic status and few or no mental health services.¹³⁹ These are all determinants of health (physical environment, access to health services, income, social status), which are affected by law/policy. The authors conclude that existing public policies in essence force drug users into situations where their social status is further diminished, resulting in ever-riskier behaviour and higher incidence rates of HIV.

Another important series of US studies described the impact of a structurally imposed barrier on HIV preventive behaviours. Researchers assessed the impact of the closure of a needle exchange program for injection drug users in a town in Connecticut. Before closure, 14% of IDUs reported unsafe sources for syringes and 16% reported sharing a syringe in the past 30 days.¹⁴⁰ After closure of the exchange, those reporting unsafe sources increased to 51% and those reporting sharing a syringe increased to 34%.¹⁴¹ After closure, the rate of reusing syringes doubled among those surveyed.

US research also suggests that the legal status of drugs and drug use equipment may also affect access to needle exchange programs. One study found that police action and the threat of police action decreased utilization of needle exchange programs by drug users, limited the number and diversity of volunteers, and inhibited the operation and expansion of the program.¹⁴² Another study identified fear of identification and/or police harassment as one of three major obstacles to accessing needle exchange programs.¹⁴³ (The other two obstacles were lack of awareness of the program and inconvenient location or hours.)

Safe or supervised injection facilities (SIFs) are another example of a harm reduction response to injection drug use. The available evidence suggests that including SIFs as a component of a policy response to HIV/AIDS is likely to produce significant benefits for both drug users and the general community, and that at the very least such initiatives must be tried.¹⁴⁴ From the perspectives of IDUs, for example, 94.4% of 195 Montreal drug users participating in a survey

¹³⁸ Fischer B et al. Profile of Illicit and Untreated Opiate Users in Toronto, Canada. *Addiction Research* 1999; 7(5): 377-415.

¹³⁹ O'Shaughnessy MV et al. "Deadly Public Policy". 12th *International Conference on AIDS*, 12: 982 [Abstract no. 44233], 1998.

¹⁴⁰ Groseclose SL et al. Impact of Increased Legal Access to Needles and Syringes on Practices of Injecting Drug Users and Police Officers – Connecticut, 1992-1993. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1995; 10: 82-89.

¹⁴¹ Broadhead RS et al. Termination of an Established Needle exchange: A Study of Claims and Their Impact. *Social Problems* 1999; 46:48-66

¹⁴² Bluthenthal RN et al. Impact of Law Enforcement on Syringe Exchange Programs: A Look at Oakland and San Francisco. *Medical Anthropology* 1997; 18(1): 61-83.

¹⁴³ Rich JD et al. Obstacles to Needle Exchange Participation in Rhode Island. *Journal of Acquired Immune Deficiency Syndromes* 1999; 21(5): 396-400.

¹⁴⁴ R Elliott, I Malkin, J Gold. *Establishing Safe Injection Facilities in Canada: Legal and Ethical Issues*. Montreal: Canadian HIV/AIDS Legal Network, 2002; T Kerr. *Safe Injection Facilities: Proposal for a Vancouver Pilot Project*. Prepared for the Harm Reduction Action Society. Vancouver, 2000.

indicated they thought implementing a SIF was a good idea, and identified safety, health issues, and the services that could be available at the facility as major reasons for supporting them.¹⁴⁵ From the perspective of those proposing such trials, there have been few thorough impact evaluation studies on SIFs conducted in Europe, and the majority of the published literature does not currently appear in English.¹⁴⁶ Available studies, however, provide some evidence in relation to the four main expected benefits of such facilities: (1) reduced visibility and public nuisance of the drug scene;^{147, 148, 149} (2) improved access and uptake of health and other welfare services;^{150, 151, 152} (3) reduced opioid-related overdose risk;^{153, 154, 155} and (4) reduced risk of blood-borne virus transmission, such as HIV/AIDS and hepatitis C.^{156, 157, 158, 159} While there is no direct epidemiological evidence to show reduced incidence of HIV transmission among clients of safe injection facilities, observed reductions in needle sharing and increased condom use reported by clients indicate a reduction in HIV risk behaviours.

In addition, two reviews of empirical assessments of the health impact of SIFs on IDUs reported that prior to the establishment of such facilities, evidence from Germany and Switzerland

¹⁴⁵ T Craig Green. My Place, Your Place, or a Safe Place: the Intention to Use a Supervised Injection Facility (SIF) in Montreal Injecting Drug Users. Data presented at *Les sites d'injection supervises: Journée scientifique de L'Unité Maladies infectieuses*, Direction de la santé publique de Montréal-Centre, 23 November 2001.

¹⁴⁶ Dolan K. et al. Drug Consumption Facilities in Europe and the Establishment of Supervised Injecting Centres in Australia. *Drug and Alcohol Review* 2000; 19: 337-346.

¹⁴⁷ Ronco C. et al. Evaluation for Alley-rooms I, II and III in Basel. *Social and Preventative Medicine* 1996; 41: S58-68.

¹⁴⁸ Jacob J. et al. *Entstehung und Praxis eines Gesundheitsraumangebotes für Drogenkonsumierende. Abschlußbericht der einjährigen Evaluation des - drop-in Fixpunkt, Hanover*. Oldenburg, Bibliotheks- und Informationssystem der Universität Oldenburg, 1999. Available at: www.archido.de/rezensiacobstoever.htm

¹⁴⁹ Kemmesies UE. *The open drug scene and the safe injection room offers in Frankfurt am Main 1995*. Frankfurt, Germany: Stadt Frankfurt/Dezernat Frauen und Gesundheit, Drogenreferat, 1999 (Original German version published INDRO 1995).

¹⁵⁰ Ronco C. et al., op. cit.

¹⁵¹ Nejedly MM, Bürki C. *Monitoring HIV Risk Behaviours in a Street Agency With Injection Room in Switzerland*. Bern, Medizinischen Fakultät: Universität Bern, 1996.

¹⁵² Kressig MM, Nydegger LB, Schuhmacher C. *Nutzen niedrigschwelliger Drogenarbeit am Beispiel der Stadt Zürich*. Schlussbericht der Gesamtevaluation der niedrigschwelligen Drogenhilfe in der Stadt Zürich. Zürich, Institut für Suchtforschung, 1996. (IDRS). Technical Report No. 73. Sydney: NDARC, 1999.

¹⁵³ AIDS Hilfe Frankfurt *La Strada Drogenhilfeprojekt: Jahresbericht, 1998*. Frankfurt: AIDS-Hilfe Frankfurt eV, 1998.

¹⁵⁴ Happel HV. *Konsumräumew – Eine effektive Maßnahme zur Schadensminimierung bei DrogengebraucherInnen und BürgerInnen*. Frankfurt: Fachhochschule Frankfurt, 2000.

¹⁵⁵ *Integrative Drogenhilfe Jahresbericht 1996*. Frankfurt: Integrative Drogenhilfe, 1997.

¹⁵⁶ Ronco C et al, op. cit.

¹⁵⁷ Jacob J, op. cit.

¹⁵⁸ Nejedly MM and Bürki C, op. cit.

¹⁵⁹ Warner MN. *Over de Drempel: Onderzoek naar de mogelijkheid om harddruggebruik binnen een opvangvoorziening in Arnhem te reguleren* [Research Into the Possibility of Regulating Hard Drug Use Indoors in Arnhem]. Arnhem, Netherlands: Gelders Centrum voor Verslavingszorg, 1997. *Health* 1997; 51: 692.7.

indicated that health services were reaching only a small portion of drug users (20% or less).^{160, 161} Substantial increases in the use of medium and high threshold services (e.g., abstinence-based treatment, methadone clinics, out-patient drug counselling) were noted in Switzerland following the introduction of a harm reduction strategy that included SIFs: 50% of drug users were registered in methadone maintenance, 15% were in abstinence-based treatment, and the remaining 35% were in regular contact with harm reduction services.¹⁶² This kind of research data illustrates how SIFs can enable contact with the most marginalized drug users and act as gateways to other systems of care and treatment. Ultimately, available data, although limited, point to the positive impact of harm reduction programs and policies.

Similarly, one comparative study explored the hypothesis that the degree and progression of illness and death among IDUs in a given law/policy environment correlate directly with the extent to which harm prevention measures and treatment are available to, and reach, IDUs.¹⁶³ These measures include needle and syringe exchange services and treatment, particularly methadone treatment for opiate addiction, as well as other social and health intervention services. Researchers adopted a time-trends perspective to compare key indicators of harm (including HIV infection rates) and preventive measures in Canada from 1988 to 1999, with similar indicators from European jurisdictions. Findings suggest that expanding coverage and reach of preventive measures for IDUs do, in fact, correlate with consistent stabilization or lessening of relevant harm indicators. In particular, in Canada throughout the 1990s, consistently limited coverage and reach of preventive measures (both secondary and tertiary) were correlated with substantial increases in rates of illness and death associated with injection drug use. The authors concluded that “it is time for Canada to regain its status as an advanced developed nation as judged by the quality and effects of its IDU policy.”¹⁶⁴

3.3 Laws and Policies that Regulate Sex Work

3.3.1 Theoretical literature

There is a large body of theoretical literature concerned with sex workers as a group vulnerable to HIV, that explores the impact of prostitution laws on health and human rights. Sex workers who are deemed most vulnerable to HIV are those in prison and those who inject drugs, those sharing non-sterile needles and those having unprotected sex with non-paying partners. Close analysis of this literature shows that sex workers practise safer sex with their clients, which suggests that it is needle use, not sex work, that is the main source of HIV infection.¹⁶⁵ The risks for acquiring HIV

¹⁶⁰ MacPherson D. *Comprehensive Systems of Care for Drug Users in Switzerland and Frankfurt, Germany - A Report From the 10th International Conference on the Reduction of Drug Related Harm and a Tour of Harm Reduction Services in Frankfurt, Germany*. Vancouver: Social Planning Department, 1999.

¹⁶¹ Lindesmith Center. *Safer Injection Rooms*. New York: The Center, 1999. Available at: www.lindesmith.org/cites_sources/safer_injection.pdf

¹⁶² Cited in MacPherson D 1999, op. cit.

¹⁶³ Fischer B et al. Injection Drug Use and Preventive Measures: A Comparison of Canadian and Western European Jurisdictions over time. *Canadian Medical Association Journal* 2000; 162 (12): 1709-1713.

¹⁶⁴ Ibid, at: 1712.

¹⁶⁵ Shaver F. “Occupational Health and Safety on the Dark Side of the Service Industry”. In T Fleming (ed) *Post Critical Criminology*, Scarborough: Prentice Hall, 1995: at 42-55.

in the context of sex work are also theoretically related to the criminalization of sex work, the use of coercive measures in settings where sex work is regulated, and the precarious working conditions that make sex workers more vulnerable to infection.¹⁶⁶

Laws/policies that regulate sex work are considered direct structural barriers to HIV prevention and care, while abuse, discrimination and stigmatization against sex workers operate as indirect structural barriers to HIV prevention and care.^{167, 168, 169} For example, one author writes: “Sex workers without rights in their place of work are uniquely vulnerable to infection with HIV and other sexually transmitted diseases, as they routinely lack the information, materials or authority to protect themselves and their clients”.¹⁷⁰ This direct impact of laws/policies is in turn associated with an indirect impact – a social and physical environment fraught with violence, discrimination and stigmatization:

The criminalization of sex for money means that hookers who are subject to abuse from their customers are less able to report their abusers. It also makes it difficult for them to insist on condom use with their customers, and thus increases their chances of becoming infected. In conversations I had with a number of women who were raped by their customers, without condoms, they said that because their work is illegal they are not willing to prosecute these men. Instead, they maintain a “bad date” list and disseminate it to other hookers. In contrast, it has been found that decriminalization of prostitution enables those in the sex trade to practise safe sex, and will ultimately result in lower infection rates.¹⁷¹

The failure of criminal prohibition to abolish the sex trade is well documented,^{172, 173, 174} and there exists much theoretical discussion of various legal and policy options to decriminalize prostitution.^{175, 176, 177, 178} Arguments for decriminalization of voluntary adult sex work point to the potential to empower sex workers to better safeguard their own health:

¹⁶⁶ Brock DR. Prostitutes are Scapegoats in the AIDS Panic. *Resources for Feminist Research* 1989; 18(2): 13-17.

¹⁶⁷ Benoit C, Millar A *Dispelling Myths and Understanding Realities: Working Conditions, Health Status, and Exiting Experiences of Sex Workers*. Victoria: Department of Sociology, University of Victoria, 2001.

¹⁶⁸ Lowman J, Fraser L. *Violence Against Persons Who Prostitute: The Experience in British Columbia*. Ottawa: Department of Justice Canada, 1995.

¹⁶⁹ Achilles R. *The Regulation Of Prostitution: Background Paper*. Presented at a workshop on harm reduction organized by the Canadian Public Health Association, 14 April 1995.

¹⁷⁰ Bindman Jo. *Redefining Prostitution As Sex Work On The International Agenda*. Anti-Slavery International and The Network of Sex Work Projects, 1997. Available at: www.walnet.org/csis/papers/redefining.html

¹⁷¹ Bastow K. Prostitution and HIV/AIDS. *Canadian HIV/AIDS Policy & Law Review* 1996; 2 (2): 13-15.

¹⁷² Federal/Provincial/Territorial Working Group on Prostitution. *Report and Recommendations in Respect of Legislation, Policy and Practices Concerning Prostitution-Related Activities*. Ottawa: The Working Group, 1998.

¹⁷³ Gemme R, Payment N. Évaluation de la répression de la prostitution de rue à Montréal de 1970 à 1991. *Revue sexologique* 1993; 1(2): 161-192.

¹⁷⁴ Shaver F. The Regulation of Prostitution: Avoiding the Morality Traps. *Canadian Journal of Law and Society* 1994; 9(1): 123-145.

¹⁷⁵ Brock DB. *Making Work, Making Trouble: Prostitution As A Social Problem*. Toronto: University of Toronto Press, 1998.

Major public health objectives in reforming prostitution laws are as follows: removing provisions that make it difficult for sex workers and their clients to take steps to protect themselves against infection; encouraging responsible behaviour by workers and clients; alleviating the stigma associated with the industry; promoting conditions within the culture of the sex industry to permit and encourage safer sex activities; and improving working conditions within the industry.¹⁷⁹

In addition, occupational health hazards of sex work include: repetitive stress injuries, respiratory infections, dependence on alcohol and other psychoactive substances, violence, emotional stress and sexually transmitted diseases. One author discussed the impact of illegality on sex workers' health, and called for the repeal of criminal laws and the use of labour and occupational health and safety regulations to reduce workplace hazards.¹⁸⁰ These would include the development of non-judgmental health care focused on the full range of occupational health and safety hazards of sex work, not simply sexual and reproductive health issues.

Finally, there is little analysis of how legalization and licensing affect access to HIV prevention and care for sex workers or their clients. In settings where prostitution-related activities are not criminalized, some literature specifically analyzes the impact of coercive measures such as compulsory HIV testing and regular medical examination of sex workers.^{181, 182} Others have suggested that mandatory HIV testing of prostitutes creates the illusion that infected sex workers have been identified and excluded from the workplace, encouraging clients to refuse to use a condom, thereby increasing, not decreasing, the risk for infection for both the sex worker and the client.^{183, 184}

3.3.2 Empirical data

Empirical investigation of the on-the-ground effects of local codes, regulations and municipal by-laws on HIV prevention and care in sex workers exists, but is less extensive than the large amount of theoretical analysis on the subject.

¹⁷⁶ Davis S, Shaffer M. *Prostitution in Canada: the Invisible Menace or the Menace of Invisibility*, 1994. Available at: www.walnet.org/csis/papers/sdavis.html

¹⁷⁷ Lowman J. *Prostitution Law Reform in Canada* Tokyo: Chuo University Press, 1998: at 919-946.

¹⁷⁸ Patterson D. HIV/AIDS-Related Law Reform in Australia. *Canadian HIV/AIDS Policy & Law Review*. 1995; 1(3): 11.

¹⁷⁹ Watchirs H. *A Rights Analysis Instrument to Measure Compliance with The International Guidelines on HIV/AIDS and Human Rights*. Australian National Council on AIDS and Related Diseases, 1999.

¹⁸⁰ Alexander P. Sex Work and Health: A Question of Safety in the Workplace. *Journal of American Medical Women's Association* 1998; 53(2): 77-82.

¹⁸¹ Sanchez J et al. Sexually Transmitted Infections in Female Sex Workers: Reduced by Condom Use But Not By a Limited Periodic Examination Programme. *Sexually Transmitted Diseases*. 1998; 25(3): 82-89.

¹⁸² Chen YA et al. Surveys of HIV-1, HTLV-1, and Other Sexually Transmitted Diseases in Female Sex Workers in Taipei City, Taiwan, from 1993 to 1996. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 1998; 18: 299-303.

¹⁸³ Alexander P. "Bathhouses and Brothels: Symbolic Sites in Discourse and Practice. In *Dangerous Bedfellows* (Colter EG et al., Eds.). Boston: South End Press, 1996: at 221-249.

¹⁸⁴ Metznerath S. To Test or Not To Test. *Social Alternatives* 1999; 18(3): 25-30.

Policies requiring the use of condoms in brothels have been reported to increase condom use among commercial sex workers in Thailand¹⁸⁵ and in Nevada,¹⁸⁶ although the application of such policies in practice raises human rights questions.¹⁸⁷

To assess the impact of criminal law and policing on sex workers' health, one study examined ethnographic work conducted among female street sex workers in New Haven and active IDUs in Denver.¹⁸⁸ The researchers located these empirical data in a broad conceptual framework, viewing law/policy as a structural determinant of health that puts social groups at risk for HIV. The findings demonstrate three ways that criminal law and policing affect HIV risk and incidence in female street sex workers and active IDUs: (1) they directly affect risk by affecting both the availability of protective equipment (syringes and condoms) and the conditions in which their use is negotiated; (2) they indirectly affect risk by increasing the vulnerability of sex workers and IDUs to incarceration (the fear and reality of arrest shape many of the activities of those interviewed, including activities related to health); and (3) they have an indirect impact because they validate stigma, racism, sexism and oppression, thereby reproducing the social inequalities that comprise the more fundamental determinants of HIV risks. The authors concluded that laws/policies aimed at promoting coercive social control generate risks to health by undermining the social conditions necessary for good health, and that this health impact disproportionately affects marginalized communities.

One Canadian study assessed the impact of non-criminal regulatory frameworks on exotic dancers' vulnerability to HIV.¹⁸⁹ Researchers found that the introduction of lap dancing

¹⁸⁵ Hanenberg RS et al. Impact of Thailand's HIV-control Programme As Indicated By The Decline of Sexually Transmitted Diseases. *Lancet* 1994; 344: 243-245.

¹⁸⁶ Albert A et al. Condom Use Among Female Commercial Sex Workers in Nevada's Legal Brothels. *American Journal of Public Health* 1995; 85: 1514-1520.

¹⁸⁷ Laws/policies introduced to protect the interests of prostitutes' clients tend to assume that Sex workers have been considered as vectors of transmission rather than persons who, for many reasons, including legal reasons, are vulnerable to contracting HIV. However, research evidence demonstrates that sex workers can and do protect themselves and their clients against the risk of HIV and other sexually transmitted infections. For example in some studies sex workers reported regularly accessing HIV testing and that the prevalence rates for HIV among this group is not significantly higher than that of the general population. [See: Allman D. et al. Exchanging Financial and Non Financial Rewards For Sex: An Analysis of Prostitution and HIV Testing Practices in a Rural Population of the Interior of British Columbia, Canada. *13th International Conference on AIDS* (Abstract no. ThPeD5569); 2000 ; and Outwater A et al. Patterns of Partnership and Condom Use in Two Communities of Female Sex Workers in Tanzania. *Journal of the Association of Nurses in AIDS Care* 2000; 11(4):46-54.] Some results also indicated that 100% of female sex workers interviewed use condoms for every sexual transaction while only 48% of female college students consistently report using condoms. [See: Shaver F. "Occupational Health and Safety on the Dark Side of the Service Industry". In Fleming T (ed.) *Post Critical Criminology*, Scarborough: Prentice Hall, 1995: at 42-55.]

¹⁸⁸ Blankenship KM, Koester S. Criminal Law, Policing Policy, and HIV Risk in Street Sex Workers and IDUS. In conference materials from *Health, Law and Human Rights: Exploring the Connections, An International Cross-Disciplinary Conference Honoring Jonathan M. Mann*. Philadelphia, 2001: at 879-883.

¹⁸⁹ Lewis J, Maticka-Tyndale E. *Final Report - Erotic/exotic Dancing: HIV-Related Risk Factors*. Windsor: University of Windsor, Department of Sociology and Anthropology, 1998.

regulations¹⁹⁰ increased the vulnerability to HIV of all exotic dancers, career and goal oriented alike. During a time lag of two years (February 10, 1994 to February 9, 1996), lap dancing was legally accepted as “decent behaviour” in Ontario and the “no touch rule” was eliminated.¹⁹¹ The researchers concluded that such regulations presented a potential for direct skin to skin, genital to genital, or oral to genital contact in the guise of dancing; they increased the probability that dancers might be sexually coerced or assaulted; and they blurred the boundary between entertainment that relies on sexual fantasy and that which involves physical contact. The authors suggested that there is a need for a change in policy regarding the regulation of strip clubs and their patrons if vulnerability to HIV is going to be decreased in these two groups of sex workers.

Another study examined the potential impact of licensing escort services on the spread of sexually transmitted infections between the US and Canada.¹⁹² This timely research focuses on the opening of a casino in Windsor, Ontario, that attracts thousands of visitors from the US, a change to the municipal policies and legislation related to certain forms of sex work that accompanied this opening, and potential transmission of sexually transmitted infections from US clientele to Canadian escorts. The study concluded that licensing of escorts and escort agencies could potentially contribute to HIV prevention through legitimizing escort work, empowering escorts, enhancing their integration in the community and improving potential access to community and health services.

Finally, one ongoing study, the *Sex Trade Advocacy Research* (STAR) project, is to develop an understanding of the way public policies (e.g., health, social service, employment, policing, municipal regulations, federal law, immigration) impact on the health, safety and well-being of

¹⁹⁰ Lap dancing usually refers to a striptease where a dancer performs while wearing little or no clothing and is seated on the customer’s lap or between his legs, often in a private or semiprivate location in the strip club. In 1997, the Supreme Court of Canada upheld a decision of the Ontario Court of Appeal in ruling that lap dancing was not “indecent behaviour”, as long as it doesn’t occur in public, i.e. on the main floor of the club. Although there is the potential for this type of interpretation, municipalities still have the power to regulate lap dancing through the implementation and enforcement of bylaws designed to control such activities. Toronto was the first municipality to institute a lap dancing bylaw. The authority of the City of Toronto to create such a bylaw was challenged and upheld in *Ontario Adult Entertainment Bar Association v. Metropolitan Toronto (Municipality)*, (1997) [118 CCC (3d) 481, aff’d (1996), 27 OR (3d) 643]. The bylaws introduced to control lap dancing required the re-establishment of the “no touch rule” (e.g., City of Mississauga, By-law No. 351-95; Municipality of Metropolitan Toronto, By-law No. 129-95) and, in some jurisdictions, the removal of private enclosures (e.g., VIP Rooms) within the clubs (e.g., City of Mississauga, By-law No. 351-95; Municipality of Metropolitan Toronto, By-law No. 123-96). These changes were reinforced by imposing hefty fines on violators. The problem with using municipal bylaws to control lap dancing is that the bylaws only affect the supply side of the industry. Municipal jurisdiction in Canada is limited to regulating adult entertainment clubs and dancers through licensing and workplace standards; it cannot regulate morality or criminal law. The result is that only those who are specified in the bylaws can be charged. As a result, similar to prostitution laws, enforcement efforts target clubs owners, managers and dancers, not customers. [See: City of Mississauga, Bylaw No. 572-79; Municipality of Metropolitan Toronto, Schedule 36 to By-Law No. 20-85;].

¹⁹¹ See: *R. v. Mara*, [1994] OJ No. 264 (Ont Ct Prov Div) (QL) (holding lap dancing not indecent); *R. v. Mara* (1996), 27 OR (3d) 643 (CA) (reversing trial judgment); and *R. v. Mara* [1997] 2 SCR 630 (reversing appeal decision, agreeing that lap dancing not indecent).

¹⁹² Maticka-Tyndale E, Lewis J. *Escort Services in a Border Town: Transmission Dynamics of Sexually Transmitted Infections Within and Between Communities – Literature and Policy Summary*. Windsor: University of Windsor, Department of Sociology and Anthropology, 1999.

sex workers in Montreal and Toronto.¹⁹³ This project is: (1) developing methods to examine a diversity of public policies from the perspective of their impact on health, safety and well-being; (2) providing in-depth information on how various policies influence health, safety and well-being in the sex industry; (3) developing guidelines for the sex industry for maximizing health, safety and well-being; (4) developing guidelines for policy to maximize health, safety and well-being in the sex industry; and (5) developing guidelines for those engaged in advocacy, community organizations and frontline workers. Results will be available in 2003.

One study in the US hints at the way in which law/policy in different areas can have cumulative effects on health along various routes. It found that among women who participate in syringe exchanges, those who do sex work are more likely to share needles, inject daily, and use shooting galleries. They were also less likely to use a condom with private partners and reported higher levels of psychological stress.¹⁹⁴ Although the authors do not explicitly point this out, one may conclude from these findings that if you are spending long hours on the street looking for clients, you might have to rely on the convenience of shooting galleries as a source of both drugs and needles. Moreover, you might not want to carry needles with you at work, both because you might not want clients to see them and because, as a sex worker, you are more likely to be arrested than someone who is not a sex worker, and would not want to risk a drug-related charge. Thus, this study suggests the double jeopardy of being both a sex worker and an IDU in a society that criminalizes both activities.

Finally, economic determinants of health in terms of workplace and income have also been studied as indicators of vulnerability to HIV. For example, two studies suggest that trading sex for drugs is closely related to conditions of poverty and homelessness, and that lower socio-economic status (e.g., street-based sex work) is more likely to be associated with vulnerability to HIV than higher socio-economic status (e.g., hotel-based sex work).^{195, 196} These studies point to the complex interactions among poverty, income, drug use and workplace, as having a direct influence on sex workers' vulnerability to HIV infection and disease progression.

3.4 Criminalizing HIV Transmission/Exposure

3.4.1 Theoretical literature

A number of cases have been reported in which people living with HIV have been criminally charged for a variety of acts that transmit HIV, risk transmission, or are perceived as risking transmission. The criminalization of HIV transmission or exposure has focused primarily on physical assault (e.g., rape and other sexual assault, biting, splashing of body fluids), and sexual

¹⁹³ The Sex Trade Advocacy Research Group is undertaking a project called *Canadian Public Policy and The Health and Well-Being of Sex Workers, 1999-2003*. Co-investigators have published background materials including a project summary and interview guide. Available at: venus.uwindsor.ca/courses/sociology/maticka/star/index.html

¹⁹⁴ Paone D et al. HIV Risk Behaviours of Current Sex Workers Attending Syringe Exchange: The Experience of Women in Five US Cities *AIDS Care* 1999; 11(3): 269-280.

¹⁹⁵ Elwood W et al. Powerlessness and HIV Prevention Among People Who Trade Sex for Drugs ('strawberries'). *AIDS Care* 1997; 9(3): 273-284.

¹⁹⁶ Estébanez P, Grant JC. The Value of Workplace Versus Income in Determining HIV Status and Other STDs Among a Sample of Spanish Sex Workers. *Sexually Transmitted Diseases* 1998; 25(4): 194-195.

activity with ostensibly consenting partners by HIV-positive individuals who conceal or do not disclose their status. There is some literature on the application of criminal law to breastfeeding of infants by HIV-positive women,^{197, 198, 199, 200} but limited discussion exists on the application of criminal law to HIV-positive health-care workers who undertake certain medical procedures, or to the sharing of drug injection equipment by HIV-positive persons.²⁰¹ The issue has received public and academic commentary and available literature raises the question of whether criminal laws and prosecutions represent healthy public policy responses to conduct that carries the risk of HIV transmission.

Criminal sanctions are generally understood as serving four primary functions: incapacitation, rehabilitation, retribution and deterrence. Socio-legal scholarship has identified various modes through which a specific law, legal institution or legal actor can influence behaviour.^{202, 203} The intended effects of criminal law include: (1) coercion (the immediate and direct application of force to compel behaviour, such as in the incapacitating and retributive functions of criminal law that seek to remove people who expose others to HIV from the population or punish them for it); (2) compliance (the voluntary obedience to law, such as in the case where a person obeys the law out of respect for legitimate authority or in the rehabilitation function of criminal law that seeks to enable the offender to change his/her future behaviour so as to avoid harming others); and (3) reliance, which refers to the fact that laws are often passed with the intention of influencing people who are not direct objects of the law's regulatory commands or prohibitions, such as in situations where one could rely on the criminal justice system for retribution for HIV transmission or exposure resulting from wrongful doing.

Some authors have considered the possible detrimental effects of using criminal law to prosecute people for transmitting HIV or engaging in activities that risk transmission, on health and public health initiatives.²⁰⁴ These include:

- Reinforcing HIV/AIDS-related stigma and the idea that people living with the disease are potential criminals or a threat to the general public;
- Spreading misinformation about how HIV is transmitted, resulting in very serious charges and sentences where there is no significant risk of transmission;
- Disincentive to HIV testing;

¹⁹⁷ Closen ML, Isaacman SH. Criminally Pregnant: Are AIDS Transmission Laws Encouraging Abortion? *American Bar Association Journal* 1990; 76: 76-78.

¹⁹⁸ Field MA. Pregnancy and AIDS. *Maryland Law Review* 1993; 52: 402.

¹⁹⁹ Sprintz H. The Criminalization of Perinatal AIDS Transmission. *Health Matrix* 1993; 3: 495-537.

²⁰⁰ Panossian AA et al. Criminalizing of Perinatal Transmission, *Journal of Legal Medicine* 1988; 19; 223-255.

²⁰¹ Elliott R. *Criminal Law and HIV/AIDS: Final Report*. Canadian HIV/AIDS Legal Network and Canadian AIDS Society, 1997.

²⁰² Sarat A, Kearns TR (eds). *Law in Everyday Life*. Arbor: University of Michigan Press, 1993.

²⁰³ Burris S. "The Social Construction of Legality". In Ewick P, Silbey SS (eds). *The Common Place of Law: Stories From Everyday Life*. Chicago: The University of Chicago Press, 1998: at 18-23.

²⁰⁴ Elliott R. Canadian HIV/AIDS Legal Network. *Criminal Law, Public Health and HIV Transmission: A Policy Options Paper*. Geneva: Joint United Nation Programme on HIV/AIDS, Best practice collection, June 2002. Available at: www.unaids.org/publications/documents/human/JC733-CriminalLaw-E.pdf

- Hindering access to counselling and support, and affecting the willingness to seek treatment, if confidential information is not protected from search and seizure by police and prosecutors; and
- Creating a false sense of security among people who are (or think they are) HIV-negative.

In addition, the paper argues that the use of criminal law may impact on human rights through: the risk of selective prosecution directed disproportionately at those who are socially, culturally and/or economically marginalized; gender inequality and criminalization; and invasions of privacy. The author concluded that any such legislation must be carefully drafted to avoid unjustifiably infringing on health and human rights.

A comprehensive review of Canadian criminal law relating to HIV examined the arguments for and against criminalization of activity that transmits or risks transmitting HIV, and discussed whether measures available under public health legislation offer a preferable alternative to using the criminal law.²⁰⁵

Other Canadian literature raises questions about the possible impact of criminal law on the access of persons living with HIV/AIDS to counselling support because of concerns about information being used as evidence in criminal prosecutions.^{206, 207}

Much literature from various jurisdictions around the world raises concerns about the invasion of privacy rights and compounding stigma in light of the probability that criminalization may in and of itself reinforce rather than redress patterns of discrimination against people living with HIV.^{208, 209, 210, 211, 212, 213, 214, 215} Overall, legal and policy analyses identify the need to assess whether criminal-

²⁰⁵ Elliott R. *Criminal Law and HIV/AIDS: Final Report*. Canadian HIV/AIDS Legal Network and Canadian AIDS Society, 1997.

²⁰⁶ Elliott R. *After Cuerrier: Canadian Criminal Law and the Non-Disclosure of HIV-Positive Status*. Canadian HIV/AIDS Legal Network, 1999.

²⁰⁷ Elliott R. *Criminal Law and HIV/AIDS: Strategic Considerations A Discussion Paper*. Prepared for the Canadian HIV/AIDS Legal Network and the AIDS Law Project in connection with "Putting Third First – Critical Legal Issues and HIV/AIDS", a satellite meeting co-hosted by UNAIDS. Durban, South Africa, 7 July 2000.

²⁰⁸ American Civil Liberties Union (AIDS and Civil Liberties Project). *Criminalizing Transmission of the Virus*. New York, NY: ACLU (undated).

²⁰⁹ Buchanan D. The Law and HIV Transmission: Help or Hindrance? *Venereology* 1999; 12(2): 57-66.

²¹⁰ Kanyangarara S. Proposed Use of the Criminal Law to Deal with HIV Transmission in Zimbabwe. *Canadian HIV/AIDS Policy & Law Review* 1999; 4 (2/3): 98-101.

²¹¹ McGolgin DL, Hey ET. "Criminal Law". In DW Webber (ed). *AIDS and the Law* (3rd Edition). New York: John Wiley & Sons Inc, 1997: at: 259-345 (and supplement).

²¹² Terrence Higgins Trust. *Consent in the Criminal Law - Response to [UK] Law Commission - Consultation Paper No. 139*. London, UK: The Trust, 1996.

²¹³ Gostin LO, Webber DW. The AIDS Litigation Project, Part I: HIV/AIDS in the Courts in the 1990s. *AIDS & Public Policy Journal*. 1998; 13(1); and Part II. *AIDS & Public Policy Journal* 1998; 13 (2).

²¹⁴ Gostin LO. *The AIDS Litigation Project, Part III: A Look at HIV/AIDS in the courts of the 1990's*. Georgetown University Law Centre & Kaiser Family Foundation, 1996.

²¹⁵ AIDS Law Project South Africa (H Axam et al.). *Aspects of the Law Relating to AIDS: The Need for a Statutory Offence Aimed at Harmful HIV-Related Behaviour - Response Paper to the South African Law Commission, 1999*.

ization of HIV transmission actually satisfies the goals of criminal justice and/or health objectives, and suggest re-directing law/policy interventions toward existing public health measures rather than creating more, or resorting too quickly to, criminal sanctions.

A number of recommendations aimed at informing the development of sound public policy in the area of criminal law and HIV/AIDS have been made.²¹⁶

- The best available scientific evidence regarding modes of HIV transmission and levels of risk must be the basis for rationally determining if, and when, conduct should attract criminal liability.
- Healthy public policy should facilitate HIV prevention, care, treatment and support by: protecting against discrimination; protecting privacy; addressing the underlying causes of vulnerability to HIV infection and risk-related activities; ensuring access to good quality HIV testing, counselling and support for risk reduction; ensuring access to anti-HIV treatment following exposure; repealing or amending laws that impede HIV prevention, care, treatment and support;
- Healthy public policy should minimize the use of criminal or coercive public health laws, and there should be no HIV-specific legislation; and
- Healthy public policy should ensure fair legal proceedings by: creating safeguards against the misuse of public health laws and powers; establishing prosecutorial guidelines to avoid the misuse of criminal law; providing legal support and services; ensuring the right to counsel; educating judiciary, police, prosecutors and defence lawyers; protecting the confidentiality of medical and counselling information; and protecting confidentiality during legal proceedings.

3.4.2 Empirical data

There is a dearth of empirical evidence documenting the health effects of the criminalization of HIV transmission/exposure, at both the individual level and the level of public health more generally. This overwhelming lack of data makes it difficult to adequately address the impact of such laws on HIV prevention or access to HIV/AIDS-related care, treatment and support. Only one study was found and its preliminary results indicate the need for research in this area.

A three-year research project is underway in the US to evaluate the impact of criminal laws on behaviour using a multi-disciplinary theory that combines legal (deterrence and norm-setting) and psychological (theory of planned behaviour) approaches.²¹⁷ The research team hypothesizes that laws and law enforcement practices influence: (1) subjective norms related to engaging in unsafe sexual behaviour, by influencing peers' attitudes towards the behaviour; (2) attitudes towards unsafe sexual behaviour, by changing the costs and benefits of the behaviour; and (3) behavioural control by imposing actual or perceived limitations on the person's ability to have risky sex.

[South African Law Commission. *The Need for a Statutory Offence Aimed at Harmful HIV-Related Behaviour*. Discussion Paper 80, Project 85, October 1998.]

²¹⁶ Elliott R. 2002, op. cit.

²¹⁷ Lazzarini Z et al. "Evaluating the Impact of Criminal Laws on HIV Sexual Risk Behavior" Presented at the *One World: Global Health - 129th Annual Meeting of the American Public Health Association*, Session No. 3039.0. Atlanta, 22 October 2001.

A report of the first year's findings provides the most complete picture to date of the existence and applications of criminal laws related to HIV risk behaviour in the US.²¹⁸ The researchers documented laws adopted by states and territories as well as prosecutions reported in legal decisions and the press between 1986 and 2001. They found that of the 316 unique cases of prosecution of persons for exposure or transmission of HIV reviewed, "sexual exposure" was the most common basis for prosecution (67%), followed by "spitting, biting or scratching" (23.4%); only a few cases involved "syringe injection or threat" (3.8%) or "selling blood" (1.6%); and no charges arose out of needle sharing. Sexual exposure cases included prosecutions for "prostitution," "solicitation of prostitutes," "consensual sex" – which included cases in which the defendant did not inform a partner of his or her HIV infection, or in which the partner's knowledge and consent to exposure was either disputed or not a valid defence – and "unconsensual sex, unclear consent."

These researchers also found that there is no evidence of the systematic enforcement of HIV exposure laws.²¹⁹ What seems to determine who gets prosecuted is the accident of being caught and brought to the attention of a willing prosecutor, and the most prominent shared characteristic of those charged with HIV-related crimes is that their alleged behaviour was already criminal without regard to their HIV status.

The authors argued that: "Seen broadly, our data do not support the view that the adoption of HIV-specific statutes establish clear rules for behaviour that direct the force of law to people engaging in clearly wrongful and dangerous behaviour. The clearest rules are aimed at conduct that is already plainly illegal, such as prostitution or intentional infection of another."²²⁰

In terms of the primary functions or intended effects of criminal law, this study also suggests ways that law/policy could impact on HIV prevention and care. Tentative conclusions were made with respect to incapacitation, legitimacy and deterrence effects of criminalizing HIV transmission/exposure, as well as privacy issues. In the absence of rigorous estimates of the effect of such prosecutions on HIV transmission, the authors noted that their research data urge caution in assuming that criminal law as currently administered is significantly influencing the HIV epidemic and in relying on criminal law as a structural intervention to prevent HIV. Caution is also justified by a consideration of criminal law's potential cost to public health:

- First, from a policy perspective, any incapacitation benefit to prevention would have to be offset by the extent to which risk is redirected into prisons where condoms and sterile needles are almost uniformly unavailable.
- Second, the findings suggest that although the media cover criminal prosecutions, the number of articles is quite low and they rarely provide clear information about the laws being applied; therefore, people may not be aware of the laws or of exactly what norms of behaviour those laws establish.

²¹⁸ Lazzarini Z et al. Evaluating the impact of Criminal Laws on HIV Risk Behavior. *Journal of Law, Medicine and Ethics* 2002; 30: 239-253.

²¹⁹ Different types of laws are applicable: public health statutes criminalizing exposure or transmission of communicable disease or STIs; HIV-specific exposure or transmission laws; and other HIV-specific crimes or sentence enhancements – statutes that deal with acts that are already crimes (e.g., prostitution, rape, assault), but are punished separately or more severely when the perpetrator knows he/she has HIV.

²²⁰ Lazzarini Z et al. 2002, op. cit.: at 247.

- Third, if we nevertheless assume that people are aware that the law prohibits consensual sex without explicit disclosure of HIV infection, we face another problem: mistrust of “the system” may be widespread in populations most vulnerable to HIV/AIDS, and therefore the legitimacy of the law generally may be suspect. “They simply may not believe that government rules about how to behave in matters of sex and drug use are due any obedience. Legitimacy quite evidently does not move gay men to obey sodomy laws or drug users to obey drug control laws. A sense of selective prosecution could also undermine legitimacy, as could personal experiences of unfairness.”²²¹
- Fourth, deterrence requires (1) knowledge that contemplated conduct is illegal and (2) concern about the likelihood of punishment sufficient to modify behaviour. We have already discussed the problem of whether current laws, or news reports of prosecutions, give adequate or accurate notice to people of what behaviour is prohibited. In addition, it is speculated that the threat of punishment may not deter the individual if he or she understands HIV infection as a terminal illness. Any effect on behaviour also likely depends on the person’s view as to the likelihood of public humiliation and incarceration.
- Finally, the researchers outline that the investigation of an HIV-related crime can raise difficult issues for public health officials since one of the key elements that a prosecutor will have to prove is that the defendant knew of his or her HIV infection by, for example, drawing information from the public health department’s testing and counselling records, which are otherwise confidential.

Results from the larger study will provide useful data on the direct and indirect health impact of law and law enforcement practices and likely correlations between the punitiveness of states’ laws and HIV sexual risk data.

²²¹ Lazzarini Z et al. 2002, op. cit.: at 250.

Section IV: Conclusions

Laws and policies, health-related or otherwise, operate as structural determinants of health by: (1) defining options, influencing choices and generally constituting the physical and social context in which individuals and populations behave; and (2) interacting with other acknowledged determinants of health. The impact of laws and policies may be related to health directly, indirectly or both. Current research strongly suggests that laws and policies influence a person's risk of HIV infection, the speed with which HIV infection will progress to AIDS, and a person's ability to manage and live with HIV/AIDS.

Literature on the impact of laws and policies on HIV testing, reporting and partner notification raises individual and public health concerns. We know, for example, that the impact of name-based surveillance on partner notification programs and on access to HIV testing may have been exaggerated. We also know that HIV/AIDS continues to be associated with many issues related to stigmatization. However, we do not fully understand whether or how laws and policies affect people's willingness to test for HIV, particularly with respect to specific populations that may be at different levels of risk or be drawn from different socio-economic strata. Further enquiry is needed to assess name-based reporting of HIV in Canada, especially with respect to its impact on willingness to test for HIV and the ethics of disclosure. For example it is not known if policies encourage confidential testing while maintaining the availability of anonymous testing. Also, additional research should determine how particular laws/policies governing how HIV test results are reported to public health authorities serve to maximize or minimize the effectiveness of testing, partner notification, and epidemiological surveillance.

Literature on the impact of drug laws and policies reveals the negative effects that criminalization of drug use has on harm reduction and access to HIV prevention and care for people who use injection drugs. The positive effects of harm reduction programs and policies, such as needle exchange, are also documented. Research has confirmed that many of the serious problems associated with illegal drug use are caused directly or indirectly, not by drug use itself, but by drug prohibition. The impact of drug legislation and policies on HIV prevention and care is one research area that is well documented, although to this point policy-makers have not responded to the evidence, and the majority of resources continue to be channelled to harmful enforcement-based strategies. Despite progress in this area of enquiry, there is still a need for further empirical work demonstrating how police enforcement of prohibitions on possession of controlled substances specifically impacts on HIV prevention and care.

Literature on the impact of laws and policies that regulate sex work raises the issue that sex workers are vulnerable to HIV, as they routinely lack the materials, the information or the authority to protect themselves and their clients. We know that criminalization of sex work means that sex workers are subject to abuse, discrimination and stigmatization, and forced to work in high-risk conditions that compromise HIV prevention efforts. We also know that vulnerability to HIV is best addressed, not by regulation of prostitution, but by prevention efforts that emphasize peer education. Further research is required to determine the impact of policies that regulate sex work, including local codes and municipal by-laws across Canada that could potentially affect HIV prevention and care for people who work in the sex industry.

There is legal analysis of various uses of criminal sanctions to address conduct that transmits or risks transmitting HIV. However, there is no empirical research documenting the lived effects of the criminalization of HIV transmission/exposure on the health and human rights of either HIV-positive or HIV-negative persons, nor is there empirical research on the impact of such laws on HIV prevention or access to care, treatment and support. Available literature raises the question of whether criminal laws and prosecutions represent a public policy response to HIV-risking conduct that will, ultimately, promote health. In particular, there is theoretical analysis to suggest that a law requiring the disclosure to sexual partners of HIV-positive status would influence willingness or reluctance to test for HIV, preference for anonymous or nominal testing, and choices about to whom, how, and in what circumstances status is disclosed. Yet, research data regarding the empirical impact of criminalization of HIV transmission or exposure in Canada are non-existent.

Research that analyzes the impact of laws or policies on the human rights and health of individuals and communities infected and affected by HIV/AIDS is urgently needed. With this evidence, decision-makers could avoid enacting laws, making legal judgments and creating policies that might infringe upon human rights or impair the health of individuals or the public generally. Such research would improve the response to HIV/AIDS by creating a legal/policy environment that supported, rather than undermined, HIV prevention efforts and promoted, rather than impeded, HIV/AIDS care, treatment and support. Most importantly, research on the impact of laws and policies would assist people living with HIV/AIDS by informing their own advocacy and building communities' capacity to improve health for all.