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File # 394-2-39

Evaluation Report: Correctional Service Canada's Safer Tattooing Practices Pilot Initiative

Evaluation Branch
Performance Assurance Sector
January 2009

Canada

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EXECUTIVE SUMMARY

Introduction

The practice of illicit tattooing in prison has been associated with high incidence and prevalence rates of blood borne infectious diseases within federal correctional institutions[1], a risk which is also extended to correctional staff members and to the general public.

In response to the Federal National AIDS Strategy (1997) and the 31st Annual Report of the Correctional Investigator (2004), Correctional Service Canada (CSC) agreed to explore expanding its infectious disease control program to include Safer Tattooing Practices as a harm reduction initiative.

In August 2005, CSC began its pilot of the Safer Tattooing Practices Initiative (STPI)[2], which was implemented through an education component and an operational component. The operational component saw the implementation of tattoo rooms in six federal institutions – one men's institution in each of the five regions (Atlantic, Cowansville, Bath, Rockwood and Matsqui Institutions) plus one women's institution (Fraser Valley Institution for Women). The education component, delivered at CSC's five regional reception centres, informed all inmates with a new federal offence about the risks of unsafe tattooing practices at the five regional reception centres. The education component also provided information through a guidelines document and pamphlets distributed at each of the six pilot sites.

This report provides findings of the targeted evaluation of the STPI. The report measures achievements and outcomes as outlined in the Evaluation Framework (2005). The report is summative in nature even though it incorporates aspects of both the formative and summative[3] approaches towards evaluation. Thus, most but not all of the immediate, intermediate and long term impacts were assessed. As such, the report includes findings and recommendations regarding the implementation of the STPI, however not all aspects of this area were examined in detail as they would in a purely formative evaluation. The findings and recommendations contained in this report are designed to guide decisions regarding the suitability of continuing the Safer Tattooing harm reduction initiative.

[1] Multiple sources cited in: Collins, P., Dias, G., Dickenson, M., Lines, R. & Vidovich, L. (2003). *Driving the Point Home: A Strategy for Safer Tattooing in Canadian Prisons.* Retrieved from http://www.pasan.org.

[2] The Safer Tattooing Practices Initiative Guidelines contain detailed information of the sociology and psychology of tattooing, tattooing in incarcerated population, health risks associated with illicit tattooing in Canadian institutions, as well as detailed implementation information. The Guidelines are available through CSC's infonet.

[3] A formative evaluation occurs at the mid-point of implementation of a policy, program or initiative, and typically focuses on implementation issues. A summative evaluation incorporates formative evaluation information close to the completion of implementation, and encompasses a broader range of evaluation objectives; namely success, cost-effectiveness, unintended effects and continued relevancy.

Evaluation Strategy

The evaluation was conducted by the Evaluation Branch, CSC, and various components were peer-reviewed by the CSC's Health Services, as well as the Public Health Agency of Canada (PHAC)[4]. Aspects of both the formative and summative approaches[5] were combined to facilitate the assessment of the evaluation objectives: success, cost-effectiveness, implementation, unintended effects and continued relevancy.

The evaluation used both qualitative and quantitative methodologies. Information used to facilitate these analyses was collected through:

- Interviews with key sources[6];
- Surveys/questionnaires specific to the initiative;
- Data derived from CSC's automated data base - the Offender Management System; and,
- A review of relevant documentation (e.g., STPI National Guidelines[7]; Media coverage and reports on the STPI).

Interviews were conducted by the evaluation team in person and by telephone during the months of August and September, 2006. Interview data were collected from the following key sources:

- Institution staff members, including: Wardens, Security Intelligence Officers (SIOs), Assistant Wardens Correctional Programs (AWCPs), Social Programs Officers (SPOs), Health workers, Correctional Officers, union representatives; and,
- Inmates at the pilot sites including the Tattooists, Tattoo Apprentices, Tattoo Clerks, inmates who received a tattoo at the tattoo room, inmates on the wait list to receive a tattoo, and Chairs of the Institutional Inmate Committee at each pilot site.

The interview process included site visits to the pilot sites during the month of August, 2006. Quantitative analyses were conducted using automated data on identified tattoo clients who received or were waiting to receive a tattoo between August 1, 2005 and August 31st, 2006. Quantitative and qualitative analyses were also conducted on data received as a result of interviews and forms completed as part of the procedural requirements of the Initiative.

[4] The Public Health Agency of Canada reviewed the Evaluation Framework and the interview keys, as well as the report.

[5] A formative evaluation occurs at the mid-point of implementation of a policy, program or initiative, and typically focuses on implementation issues. A summative evaluation incorporates formative evaluation information close to the completion of implementation, and encompasses a broader range of evaluation objectives; namely success, cost-effectiveness, unintended effects and continued relevancy.

[6] Sources included but were not limited to: Wardens, Assistant Warden Correctional Programs, Security Intelligence Officers, Health Services employees, local Union representatives, Correctional Officers, Social Program Officers, Tattooists, and Inmates (who had received tattooing services or were on the waiting list).

[7] Document can be found at http://infonet/HS/documents/guidelines_e.pdf

Financial Expenditures

Actual expenditures for the STPI were $960,689.63 throughout the course of the Safer Tattooing Practices Pilot Initiative (7 months of start-up plus approximately 12 months implementation period). Expenditures reflect start-up costs (construction and equipment, supplies, staff expenditures on salaries, travel, and education and training costs, and technical contracts) and ongoing expenditures (see Table below).

Actual Costs Associated with the STPI

Start-up Costs Prior to Implementation (7 months)	
Construction and equipment	**$40,538.20**
Tattoo Room Supplies	**$148,139.57**
Staff Expenditures (salary, training, travel, etc.)	**$143,973.33**
Technical Contracts	**$25,000.00**
Sub-Total	**$357,651.10**
Ongoing Implementation Costs (approx. 12 months)	
Staff Expenditures	**$287,946.67**
Materials (ink, needle tips, etc.)	**$315,091.86**
Sub-Total	**$603,038.53**
TOTAL	**$960,689.63**

Key Findings

FINDING 1: The Initiative has resulted in an enhanced level of knowledge and awareness amongst staff and inmates regarding blood borne infectious disease prevention and control practices.

FINDING 2: Initial results of the initiative indicate potential to reduce harm, reduce exposure to health risk, and enhance the health and safety of staff members, inmates and the general public with higher risk groups (medium and maximum security institutions for male offenders).

FINDING 3: The Initiative provided additional employment opportunities for inmates in the institution, and work skills that are transferable to the community.

FINDING 4: Tattooing activities at most pilot sites were constrained due to the limited number of trained Tattooists.

FINDING 5: Tattooing hours of operation were sporadic at some sites, and thus had an impact on the number of tattoos administered.

FINDING 6: The cost of the Safer Tattooing Practices Initiative is low respective to the potential benefit.

FINDING 7: Implementation issues, such as the tattooist skill level, training and availability, negatively impacted the effectiveness and efficiency of the Initiative.

FINDING 8: Enhancements to the current delivery model could address many of the implementation issues in a more cost effective and efficient manner.

FINDING 9: There was some perceived increase in the demand for tattoos, particularly at the women's multi-level and men's minimum security level pilot sites.

FINDING 10: The Safer Tattooing Practices Initiative remains consistent with the goals and objectives of the Federal Initiative to Address HIV/AIDS in Canada.

FINDING 11: There is a need for more information regarding inmate infectious diseases and risk behaviours in order to adequately evaluate future harm reduction initiatives.

Recommendations

RECOMMENDATION 1: To maintain an enhanced level of knowledge and awareness of infection prevention and control practices, CSC should continue the education component of the Safer Tattooing Practices Initiative.

RECOMMENDATION 2: CSC should integrate the evaluation findings with results of the National Inmate Infectious Diseases and Risk Behaviours Survey, and the recommendations of the Health Care Advisory Committee, to ensure an optimal and cost-effective harm reduction strategy.

RECOMMENDATION 3: If CSC decides to continue the operational component of the Initiative, the following modifications should be considered to ensure enhanced levels of success, efficiency and cost-effectiveness:

- ***Consider providing tattoo services in federal institutions only where the risk of blood borne infectious disease transmission through illicit tattooing is revealed to be high.***

- ***Revise the Peer Education and Counselling (PEC) training requirement for inmate tattooists such that this component is delivered primarily as a self-study module, requiring successful completion of a written exam.***

- ***Raise the cost of a tattoo session for inmates such that prices are commensurate with what an individual would pay in the community as a proportion of their disposable income.***

- ***Ensure all Program Officers are provided with direction to operate the Tattoo Room, such that the room's operating hours meet the needs of inmates.***

- ***Purchase full-size ink bottles such that the Initiative coordinator dispenses a pre-specified amount of ink outside of the tattoo room, keeping the bottles in their possession at all times.***

- ***Increase the capacity of the tattoo room.***

- ***Consider using services from community tattooists to train inmate tattooists in the art of tattooing.***

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

AWCP	Assistant Warden Correctional Programs
CSHA	Canadian Strategy on HIV/AIDS
CD	Commissioner's Directive
CSC	Correctional Service Canada
CCRA	Corrections and Conditional Release Act
DI	Disposable Income
HB	Hepatitis B
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
IRP	Infection Risk Profile
IDU	Injection Drug Use
IMRS	Integrated Management Reporting System
OSH	Occupational Safety and Health
OIA	Offender Intake Assessment
OMS	Offender Management System
PEC	Peer Education and Counselling
PEP	Post-Exposure Prophylaxis
PHAC	Public Health Agency of Canada
RAP	Reception Awareness Program
STPI	Safer Tattooing Practices Initiative
SIO	Security Intelligence Officer
SPO	Social Programs Officer
SAS	Statistical Analysis System Analysis System
VDRL	Venereal Disease Research Laboratory

INTRODUCTION

1. Program Profile

1.1 Background

Correctional Service of Canada (CSC) plays a role in maintaining a just, peaceful and safe society and in assisting in the government's overall agenda of improving the health, safety and the quality of life of Canadians.[8] The Safer Tattooing Practices Initiative (STPI) was a health and a harm reduction initiative piloted to support the Federal Initiative to Address HIV/AIDS in Canada.

The STPI aimed to support key results associated with CSC's overall strategic outcome: "Offenders are safely and effectively accommodated and reintegrated into Canadian communities."[9] To support the achievement of this outcome, CSC has identified a "care and custody" program activity, which includes a wide range of activities that address the health and safety needs of offenders. The STPI is one of the activities that were put in place to support the achievement of priorities identified under the care and custody program activity: enhance health and well being, and reduce the risk of transmission of blood borne infectious diseases.[10]

Furthermore, the STPI directly and indirectly aimed to contribute to one key area of federal government involvement: the health of Canadians. The direct contributions can be described as the surveillance and control of blood borne infectious diseases within federal penitentiaries, and the potential reduction in illicit tattooing and spread of blood borne infectious diseases; specifically, the decrease in the spread of blood borne infectious disease among inmates and their families, and the enhanced safety of staff members. Indirect contributions were the potential of enhanced public health and reduced costs to the health care system. Consequently, the legitimate role for CSC to test this initiative was also confirmed by the consistency with government priorities.[11]

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8 See the October 2004 and April 2006 Speeches from the Throne
9 idem
10 See the 2005-2006 Report on Plans and Priorities for the Correctional Service Canada
11 Idem and Canada's Performance: Annual Report to Parliament 2004

The practice of illicit tattooing in prison has been associated with high incidence and prevalence rates of blood borne infectious diseases within federal correctional institutions[12]. Specifically, the practice of non-sterile tattooing places inmates at a higher risk of Human Immunodeficiency Virus (HIV), Hepatitis C Virus (HCV) and Hepatitis B Virus (HBV) infection, relative to the general population. The risk of infection is extended to correctional staff members and to the general public, as inmates are supervised in prison and the vast majority is eventually released to Canadian communities.

Correctional Service Canada's (CSC's) National Inmate Survey (1995) revealed that 45% of respondents reported they had received a tattoo in prison. Of those, 30% reported they thought that the equipment was unclean or could not ascertain that it was clean[13]. Notably, the prevalence rates of Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV) within this population are much higher than that of the Canadian population (1.9% versus 0.2%, and 24.6% versus 0.6%, respectively)[14]. This disparity is becoming larger as, within the incarcerated federal offender population, the rate of blood borne infectious diseases has been on the rise. Between 2002 and 2005, the number of HCV cases in federal prisons is projected to increase by 12.9% (from 3,173 to 3,581)[15].

In response to Federal National AIDS Strategy[16] (1997) and the 31st Annual Report of the Correctional Investigator[17] (2004), Correctional Service Canada (CSC) agreed to explore expanding its infectious disease control program to include Safer Tattooing Practices as a harm reduction initiative.[18] As stated in the CSC response, objectives of the Initiative were to i) minimize the risk of transmission of blood borne infectious diseases in the inmate population

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[12] Multiple sources cited in: Collins, P., Dias, G., Dickenson, M., Lines, R. & Vidovich, L. (2003). *Driving the Point Home: A Strategy for Safer Tattooing in Canadian Prisons.* Retrieved from http://www.pasan.org.

[13] Correctional Service of Canada (1995*). Special report: CSC national inmate survey 1995 final report.* Ottawa: Correctional Service of Canada.

[14] Correctional Service of Canada Infectious Disease Surveillance System. Preliminary Data (up to year 2002.)

[15] Ibid.

[16] This Strategy was directed at responding to the issues of HIV/AIDS in Canada. The evaluation report (1997) concludes that resources are required for further developmental work towards achieving the goals of the Strategy, including tattoo equipment in institutions.

[17] The Correctional Investigator is mandated by Part III of the *Corrections and Conditional Release Act* as an Ombudsman for federal offenders.

[18] In the 31st Annual Report of the Office of the Correctional Investigator (CI), the CI recommended that CSC introduce a safe needle exchange program based on thorough consultation with medical and security experts, offenders, CSC staff and concerned community organizations.

and to the community at large; ii) minimize the risk of CSC staff injuries; iii) to educate inmates regarding the transmission of infectious diseases associated with illicit tattooing, and iv) promote health and wellness while maintaining security. Subsequently, the Safer Tattooing Practices Pilot Initiative was introduced as a component of the enhanced Canadian Strategy on HIV/AIDS (CSHA)[19] announced by the Minister of Health in 2004. CSC's partners in the CSHA include the Public Health Agency of Canada, Health Canada, and the Canadian Institutes of Health Research.

Illicit tattooing in Canadian federal institutions also poses health and safety risks to correctional staff members and to the public at large. Between 1997 and 2004, there has been an increase in contraband seizures of tattoo related paraphernalia within federal institutions[20]. Over the same time period, there were 48 recorded staff injuries resulting from a puncture with a sharp object directly related to tattoo needles[21].

As inmates are released to the community, potential health risks are extended to their families, partners and the public in general[22]. Between 2000 and 2002, the number of HIV and HCV infected inmates released to the community has increased. For HCV, the increase was 60%, from 1,156 in 2000 to 1,856 in 2002, and for HIV there was a 13% increase from 162 in 2000 to 183 in 2002[23].

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[19] In May 2004, the Minister of Health reaffirmed the federal government's commitment to fighting HIV/AIDS, and announced an expanded and strengthened federal role in addressing HIV/AIDS through the enhanced Federal Initiative to Address HIV/AIDS in Canada, under the new title "The Federal Initiative to Address HIV/AIDS in Canada".

[20] Correctional Service of Canada's Offender Management System (OMS).

[21] Data provided through CSC's Occupational Health and Safety division.

[22] Infectious diseases prevention and control in Canadian penitentiaries 2000-01: A report by CSC's Infectious Diseases Surveillance System

[23] Smith, J. (2005). Hepatitis C Surveillance. *Focus on Infectious Disease, 3 (1)*. Retrieved from http://www.csc-scc.gc.ca.

1.2 Policy and Legislation

Section 70 of the Corrections and Conditional Release Act (CCRA, 1992) provides the legislative framework within which the Correctional Service of Canada can address the health and safety issues associated with illicit tattooing:

> ***70.*** *The Service shall take all reasonable steps to ensure that penitentiaries, the penitentiary environment, the living and working conditions of inmates and the working conditions of staff members are safe, healthful and free of practices that undermine a person's sense of personal dignity.*

In addition to the CCRA, Commissioner's Directive 821: *Management of Infectious Diseases* (CD 821, 2004) also provides a framework within which CSC can implement harm reduction measures. Specifically, the policy's objective indicates that CSC is to contribute to public health and a safe and healthy environment through a comprehensive infectious diseases program.[24] The principles of this policy also stipulate that a full range of infectious disease program elements, including but not limited to screening/testing, immunization, education and training, harm reduction measures, care and treatment, surveillance activities, and partnerships, shall be implemented based on best evidence and public health expertise.[25]

The goals of the revitalized strategy, introduced jointly by the Minister of Health and the Minister of State (Public Health), were to:

1. Prevent the acquisition and transmission of new infections;
2. Slow the progression of disease and improve the quality of life;
3. Reduce the social and economic impact of HIV/AIDS; and,
4. Contribute to the global effort to reduce the spread of HIV and mitigate the impact of the disease.

Under the renewed Federal Initiative to Address HIV/AIDS in Canada, CSC identified three areas of pursuit: (1) knowledge, via surveillance of the epidemics of infectious diseases in prisons; (2) expanded intervention throughout sentence, from admission through to and

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[24] Correctional Service Canada, Commissioner's Directive 821, s.1
[25] Correctional Service Canada, Commissioner's Directive 821, s.9

including the community portion; and (3) coordinated responses through strengthened prevention activities with public health units and federal/provincial/territorial partnerships.

1.3 The Initiative

Correctional Service Canada's Safer Tattooing Practices Initiative was introduced as a component of the enhanced Canadian Strategy on HIV/AIDS[26] announced by the Minister of Health in 2004. As a health and a harm-reduction initiative, the objectives of the STPI were to:

i) Minimize the transmission of blood borne infectious diseases in the inmate population and to the community at large;
ii) Minimize the risk of CSC staff injuries;
iii) educate inmates regarding the transmission of infectious diseases; and,
iv) Promote health and wellness while maintaining security.

Implementation of the Initiative began in August 2005 with two main components:

1. The Operational Component made tattoo rooms operational in 6 institutions – one men's institution in each region (Atlantic, Cowansville, Bath, Rockwood and Matsqui Institutions) and one women's institution (Fraser Valley Institution for Women)[27]. Safer tattooing services were provided by inmate tattooists who had successfully completed training on blood borne infectious diseases and infection prevention and control practices. The tattoo room selected within the institution was designated as a controlled environment in meeting the standards for infection prevention and control practices. Supervision of the designated area was to ensure ongoing quality control of the service provided, as well as safety and security.

2. The Education Component provided educational materials through the Reception Awareness Program, which is available to all inmates entering with a new federal offence at CSC's Regional Reception Centres, and through pamphlets distributed within all pilot sites. Education materials informed inmates with regards to risks of unsafe tattooing practices. Education was also provided at pilot sites through the Peer Education and Counselling (PEC) program and the Safer Tattooing Practices Initiative Guidelines.

   The Safer Tattooing Guidelines describe this component of the initiative as follows:

   "The CSC Safer Tattooing Practices Initiative (STPI) provides education to all inmates about safer tattooing practices. This is achieved through:

   - *A CSC Safer Tattooing Practices Initiative pamphlet provided to all inmates upon entry to CSC and available to all inmates.*

[26] In May 2004, the Minister of Health reaffirmed the federal government's commitment to fighting HIV/AIDS, and announced an expanded and strengthened federal role in addressing HIV/AIDS through the enhanced Federal Initiative to Address HIV/AIDS in Canada, under the new title "The Federal Initiative to Address HIV/AIDS in Canada".

[27] Additional information about these institutions is available at: http://www.csc-scc.gc.ca

- *Incorporation of information about CSC's Safer Tattooing Practices Initiative into the Reception Awareness Program.*
- *Availability of the STPI Guidelines to inmates in the general population*
- *Opportunities for inmates to participate in the training received by the inmate tattooist (Peer Education and Counselling Program and access to the STPI Guidelines) even if they are not applying for the position."*

1.4 Profile of Pilot Site Participants: Operational Component

Demographic Profile

Between August 1, 2005 and August 31st, 2006, 384 inmates sent out requests for tattoo services. Among them, 324 inmates (89% were men and 11% were women) received a tattoo through the Safer Tattooing Practices Initiative and, at the data collection cut-off date (August 31st, 2006), there was 60 inmates who were waiting and had not yet receive a tattoo through the Initiative. Tattoos were provided at the six (6) pilot sites across the regions: Atlantic Institution (Atlantic)[28], Cowansville (Quebec)[29], Bath Institution (Ontario)[30], Rockwood Institution (Prairie Region)[31], and Matsqui and Fraser Valley Institution for women (Pacific)[32]. The pilot sites ranged in security level, thus 15.2% of participants resided in a minimum security institution, 66.2% were in medium security, 8.1% were in maximum security and 10.5% were in a multi-security level institution for women. Twenty tattooists were trained to provide tattoo services. By the cut-off date, tattoo shops had operated 1,566 days in total and 1,043 tattoo sessions were performed. Of those who received a tattoo through the Initiative, 89.0% were men and 11.0% were women, and all those waiting to receive a tattoo through the Initiative at the data cut-off point were men. For both tattoo recipients and those wait listed, 19.3% were Aboriginal. The average age for this group at the beginning of the Initiative was 32 years, and 6.1% were identified as being gang members or gang affiliates. Interestingly, 68% of men and 41% of women were identified as already having a tattoo prior to the Initiative.

[28] Additional information about this institution is available at: http://www.csc-scc.gc.ca
[29] Additional information about this institution is available at: http://www.csc-scc.gc.ca
[30] Additional information about this institution is available at: http://www.csc-scc.gc.ca
[31] Additional information about this institution is available at: http://www.csc-scc.gc.ca
[32] Additional information about this institution is available at: http://www.csc-scc.gc.ca

Region	Pilot Sites[33]	Tattooist Trained [34]	Days of Operation [35]	Tattoo Sessions [36]	Requests for Tattoo Services[37]
Pacific	Matsqui	4	376	377	63
	Fraser Valley Institution	2	98	116	53
Prairies	Rockwood	5	349	118	141
Ontario	Bath	4	238	80	36
Quebec	Cowansville	2	364	264	35
Atlantic	Atlantic	3	141	88	56

Infection Risk Profile (IRP)

For this evaluation, it was not possible to determine the precise incidence rate of HIV and Hepatitis among the inmate population. The only way in which to obtain accurate, valid information regarding these incident rates would be to conduct a seroprevalence study (i.e., blood tests to determine presence of the diseases). This was not possible for two reasons: 1) ethical issues associated with privacy (e.g., obtaining consent for offenders to take a blood sample or review medical health records for blood borne infectious disease information); and 2) the amount of time that it would take to collect this data for all inmates participating in the safer tattooing program. To address this limitation, the Infection Risk Profile (IRP) was developed to obtain an indication the degree of infection with blood borne diseases among the inmate population. However, it is important to note that this measure provided an indication of "risk" for blood borne infectious disease, not an actual indicator of the presence or absence of a blood borne infectious disease.

For the purposes of this evaluation, inmates receiving or waiting to receive a tattoo were classified into either a high risk or low risk grouping, where risk refers to the likelihood of having a blood borne infectious disease, specifically the Human Immunodeficiency Virus (HIV),

33 The cut-off date for data collection was August 31, 2006, and data received before cut-off date was incorporated in the above table. However, data received after September 2006 may also contain information that covers the operation period.
34 Information was from "Inmate Tattooist Testing and Results" forms provided by pilot sites.
35 Information was taken from "Tattoo Shop Movement and Tool Control" forms provided by pilot sites. Days were calculated as the period between the first and the last tattoo service in our records..
36 Information was taken from "Tattoo Shop Movement and Tool Control" forms provided by pilot sites.
37 Information was from "Request for Tattoo Service" forms provided by pilot sites.

Hepatitis B Virus (HBV) or Hepatitis C Virus (HCV). The 'high' and 'low' risk groupings were accomplished through the creation of an Infection Risk Profile (IRP) of the inmate population. The IRP, created for the purposes of this report, was used to establish whether 'high risk' inmates were using the services provided through the program. The IRP is based on items that have been identified in the literature[38] as factors that are associated with having a blood borne virus. The IRP items were approximated using automated data[39] and validated in the sample of inmates interviewed for the evaluation (see Methods section). Of those inmates at the pilot sites for whom interview data were available, 25.1% were classified as high risk on the IRP. Of all inmates who were interviewed and who reported they were tested for a blood borne infection, 30.3% reported they were infected with HBV, HCV and/or HIV.

1.5 Profile of New Federal Admissions: Education Component at Intake

Demographic Profile

A demographic profile was derived for all new federal admissions to custody (i.e., offenders with a new federal offence) between March 1, 2006 and May 16, 2006 (N=978). During this time period, offenders were exposed to the education component of the STPI as part of the Reception Awareness Program (RAP)[40], and were also asked to complete the Evaluation Branch's pre-post questionnaire (see Appendix 1). The average age of this admissions cohort was 34 years, and the average sentence length was 3.4 years. Further, 10.8% were rated as minimum security, 53.3% as medium security and 35.9% as maximum security[41]. Approximately 19% were Aboriginal, and a representative proportion of the total number of admissions was women (5.8%). There were 3.5% admitted with a homicide offence, 26.0% with a robbery offence, 6.5% with a sex offence and 31.2% with a drug-related offence[42]. Forty-five percent of those admitted during this time period was identified as having a tattoo upon admission. Of those inmates who completed the questionnaire administered after the RAP (N=599), 39% indicated that they would prefer to receive a tattoo through the Safer Tattooing Practices Initiative in the institution while

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38 See Appendix 7 for references.

39 Data regarding the Offender Intake Assessment (OIA) were extracted from CSC's automated Offender Management System. The OIA collects extensive information pertaining to a number of offender static and dynamic factors.

40 For a detailed description of the Education component, please refer to the introduction of this report.

41 Security ratings as per CSC's Custody Rating Scale.

42 Numbers do not add to 100 as offence categories are inclusive. That is, an offender may have both a robbery and drug offence, and thus be included in both groups.

2% indicated they would prefer to receive a range tattoo. Over half (55%) of inmates completing the post Reception Awareness Program questionnaire indicated that they would prefer not to get a tattoo in a correctional institution.

Infection Risk Profile (IRP)

As noted earlier, the IRP was created for the purposes of this report, and was based on items identified in the literature as factors associated with having a blood borne infection. Of those new admissions to federal custody for whom data were available, 22.2% were classified as high risk of having a blood borne infection as per the IRP. This is just slightly lower than the 25.1% of the inmate population at the selected sites who were classified as high risk on the IRP.

1.6 Financial Expenditures

Actual expenditures for the STPI were $960,689.63 throughout the course of the Safer Tattooing Practices Pilot Initiative (7 months of start-up plus approximately 12 months implementation period). Expenditures reflected i) start-up costs, i.e. one-time costs at the start of the pilot such as construction and equipment, supplies, staff expenditures on salaries, travel, and education and training costs, and technical contracts, and ii) ongoing expenditures (see Table 1).

Table 1: Actual Costs Associated with the STPI

Start-up Costs Prior to Implementation (7 months)	
Construction and equipment	$40,538.20
Tattoo Room Supplies	$148,139.57
Staff Expenditures (salary, training, travel, etc.)	$143,973.33
Technical Contracts	$25,000.00
Sub-Total	$357,651.10
Ongoing Implementation Costs (approx. 12 months)	
Staff Expenditures	$287,946.67
Materials (ink, needle tips, etc.)	$315,091.86
Sub-Total	$603,038.53
TOTAL	$960,689.63

1.7 Logic Model

The logic model is a schematic representation of the essential components of that which is being evaluated (Posavac & Carey, 1992). It delineates the philosophy and relevant issues that underlie the basic principles of the pilot of the Safer Tattooing Practices Pilot Initiative, linking the flow of activities to their outputs, and finally to their expected outcomes (see Appendix 2). Three activities were identified as being essential to meeting the requirements of the Initiative:

1) Education of inmates (at pilot sites and upon admission to federal custody) regarding infection prevention and control and safer tattooing practices;
2) Recruitment and training of the tattooist and inmate clerk;
3) Operation and supervision of the tattoo room at the designated pilot site.

These activities had several outputs: information distributed through pamphlets and incorporated into the Reception Awareness Program, pre-employment screening of tattooist for HB immunization and optional screening of other diseases (Hep A, C, VDRL & HIV), inmate certificate of completion of Peer Education and Counselling program, safe tool and environment control measures, and new and cover-up tattoos.

The expected results of the activities carried out were grouped into immediate, intermediate and long-term impacts. Given the summative nature of the evaluation and time constraints, most but not all of the immediate, intermediate and long term impacts were assessed[43].

The four immediate impacts were:

1. Increased awareness of blood borne diseases, infection risks and prevention measures related to tattooing;
2. Safer tattooing practices in a controlled environment, with infection prevention and control practices;
3. Additional employment opportunities for inmates; and,
4. Proper disposal of used sharps, and maintenance of tattoo supply inventory.

[43] See the limitations section for a discussion on the issues associated with the assessment of successful reintegration.

Intermediate impacts were listed as:

1. Promotion of health and wellness while maintaining security;
2. Reduced risk of needle stick injuries to staff;
3. Improved reintegration;
4. Reduction in the display of violence, hate and gang related tattoos; and,
5. Tattoo portfolio for tattooist.

Ultimately the expected long-term impacts of the STPI, as illustrated in the logic model, were:

1. Reduced risk of infection (HIV, HCV & other blood borne diseases) in the inmate population, CSC staff, and community while maintaining security; and;
2. Contribution to successful re-integration.

2.0 EVALUATION METHOD

2.1 Scope of the Evaluation

The Summative Evaluation was conducted by the Evaluation Branch, CSC, and various components were reviewed by the CSC's Health Services, as well as the Public Health Agency of Canada (PHAC)[44]. This targeted evaluation was completed to inform decision-making on the future disposition of the program and focused on success, cost-effectiveness, continued relevancy, as well as unintended effects, as outlined in the Evaluation Framework (2005)[45].

2.2 Sample Composition

2.2.1 Key Sources

Information was collected from individuals and groups considered to be primary stakeholders as specified in the STPI National Guidelines; specifically, the Assistant Warden Correctional Programs (AWCP), the Social Programs Officer (Tattoo Room), Security Intelligence Officers, Health Workers, Correctional Officers, Union representatives, those who have received a tattoo through the Initiative, those who have not received a tattoo and were on the waiting list, Tattooists, Tattoo Apprentices, Tattoo Clerks, and Inmate Committee Chairs. Overall, 234 people were interviewed.

Information was also collected to assess the education component of the STPI delivered to all new federal admissions through the Reception Awareness Program (RAP). Confidential questionnaires were administered to a representative sample of admissions immediately before and after the RAP. For the purposes of this evaluation, a sampling plan was developed that was expected to adequately reflect the total new admissions to federal custody for one year. The resulting cohort of new admissions was taken between March 1st, 2006 and May 16th, 2006 (N=978).

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[44] The Public Health Agency of Canada reviewed the Evaluation Framework and the interview keys, as well as the current report.

[45] The Evaluation Framework for the Safer Tattooing Practices Pilot Initiative provides more information of the program description, delivery approach, governance structure, Stakeholders and anticipated key results. The framework can be found through CSC's infornet.

2.2.2 Automated Data

Information was also collected from Tattoo Room Movement and Tool Control forms as well as Request for Tattoo forms. These forms are maintained for administrative and monitoring purposes, and were used to identify all offenders who received or requested to receive a tattoo at any point in time between August 1st, 2005 and August 31st, 2006 (*N*=384). CSC's Offender Management System (OMS) was used to identify and profile all new federal admissions that occurred during the time in which the education component of the STPI was delivered at CSC's Regional Reception Centres.

Data regarding staff injuries and costs of Post-Exposure Prophylaxis[46] (PEP) were also collected from CSC's Occupational Safety and Health (OSH) Program. These data identified the number of tattoo-related injuries to CSC staff members over the past ten years, as well as the costs CSC incurred for staff to have PEP administered.

The key data source of financial information, used for the cost-effectiveness analyses, was drawn from CSC's Integrated Management Reporting System (IMRS). Data regarding HIV and HCV treatment costs were also collected from CSC's Infectious Disease Surveillance System as well as from regional pharmacists and infectious disease nurses.

2.2.3 Document Review

Documents reviewed for various components of the evaluation were:

- STPI National Guidelines;
- Reception Awareness Program delivery module;
- CSC financial records;
- Literature regarding the risk, treatment and costs associated with HIV, HCV, HBV;
- Peer Education and Counselling Program Guidelines;
- Documents provided by CSC staff members to the evaluation team; and,
- Documents provided by inmates to the evaluation team[47].

[46] Post-Exposure Prophylaxis, or PEP, is a medical treatment treatment started immediately after exposure to a disease (such as a disease-causing virus), in order to prevent the disease from breaking out.

[47] The Evaluation team accepted the written comments of some staff and inmates who did not want to be interviewed but still wanted to provide their opinion, and incorporated these comments by identifying themes commensurate with the qualitative data solicited through the interview keys.

2.3 Measures

2.3.1 Infection Risk Profile (IRP)

The Infection Risk Profile, developed for the purposes of this evaluation, was created through the following steps:

1. Profile items were established based on factors that have been identified in the literature[48] as those associated with having a blood borne infection.

Following an analysis of several national and international sources of information regarding Hepatitis C in correctional institutions, five factors were identified as placing inmates at risk of having the Hepatitis C Virus (HCV):

i) Injection Drug Use (IDU);
ii) Non-injection narcotics abuse;
iii) Previous prison tattoo;
iv) Previous incarceration; and,
v) Engaging in high-risk sexual activity.

Foremost, Injection Drug Use (IDU), both current and previous, was identified as the most significant risk factor for contracting HCV.[49] Non-injection narcotics abuse, such as smoking cocaine or heroin, was also recognized as a possible method of transmission of HCV.[50] Previous incarceration was also a significant risk factor that was associated with

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[48] See Appendix 7.

[49] Abbas, J., Shahnaz, S., Kamyar, M., Shahram, M. & Hossein, S.A. (2006) Risk Factors in Addict Prisoners of Central Provinces of Iran. *The Internet Journal of Epidemiology, 3 (1)*. Retrieved from http://www.ispub.com/.
Champion, J. K., Taylor, A., Hutchinson, S., Cameron, S., McMenamin, J., Mitchell, A., et al. (2004). Incidence of Hepatitis C Virus Infection and Associated Risk Factors among Scottish Prison Inmates: A Cohort Study. *American Journal of Epidemiology, 159 (5)*, 514-519.
Correctional Service of Canada, Health Services (2003). *Infectious Diseases Prevention and Control in Canadian Federal Penitentiaries 2000-01: A Report of the Correctional Service of Canada's Infectious Diseases Surveillance System*. Retrieved from http://www.csc-scc.gc.ca.
Ontario Ministry of Health (2006). *Assessment Guide for Hepatitis Risk Factors.* Toronto: Queen's Printer for Ontario.
Public Health Agency of Canada (2004). Hepatitis C Virus Transmission in the Prison/Inmate Population. *Canadian Communicable Diseases Report, 30 (16).* Retrieved from http://www.phac-aspc.gc.ca/.
Salcido, R., & Chen, L. (n.d.). *Hepatitis A, B, and C Prevention Programs: Information and Programs for Adults and Adolescents at Risk.* Carson City, NV: Nevada State Health Division and Nevada Department of Corrections.
Tepper, M. (1998). The Epidemiology of Hepatitis C in Canada. *The Hepatitis Information Network*. Pointe Claire, QC.
Thaisri, H., Lerwitworapong, J., Vongsheree, S., Sawanpanyalert, P., Chadbanchachai, C., Rojanawiwat, A., et al. (2003). HIV Infection and Risk Factors among Bangkok Prisoners, Thailand: A Prospective Cohort Study. *BMC Infectious Diseases, 3 (25).*

[50] Ontario Ministry of Health (2006). *Assessment Guide for Hepatitis Risk Factors.* Toronto: Queen's Printer for Ontario.

contracting the virus.[51] Moreover, receiving a body piercing or tattoo, notably a piercing/tattoo in prison or from an unregulated establishment, is recognized as a high-risk activity for HCV.[52] Dangerous sexual activities that involve blood contact, including unprotected sex or prostitution, carry the risk of HCV transmission.[53] Apart from the previous risky behaviours, homelessness has been identified as a minor risk factor in one report.[54].

2. Congruent OMS items were identified to serve as proximal indicators.

It was established that the above items could also be approximated through CSC's automated data and applied to a larger sample if appropriate. For items i) and ii) (*IDU and non-injection narcotics abuse*), data collected upon an offender's admission identifying those with histories of frequent drug use was used as a proxy-indicator. Similarly, for item iii) (*previous prison tattoo*) the CSC data describing an offender's physical profile was used to establish whether they had a tattoo at the time of incarceration. Although it could not be determined whether the tattoo was received in prison or from an unregulated establishment, item iv) (*previous incarceration*) was modified to include only those with a previous federal incarceration, thus increasing the opportunity that the tattoo was received while incarcerated[55]. Finally, there were no OMS data that would identify high-risk sexual practices, thus item v) (*engaging in high-risk sexual activity*) was not approximated.

3. Inmates were asked to self-report on various risk factors and infection status as part of the evaluation questionnaire.

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[51] Public Health Agency of Canada (2004). Hepatitis C Virus Transmission in the Prison/Inmate Population. *Canadian Communicable Diseases Report, 30 (16).* Retrieved from http://www.phac-aspc.gc.ca/.
Salcido, R., & Chen, L. (n.d.). *Hepatitis A, B, and C Prevention Programs: Information and Programs for Adults and Adolescents at Risk.* Carson City, NV: Nevada State Health Division and Nevada Department of Corrections.
Tepper, M. (1998). The Epidemiology of Hepatitis C in Canada. *The Hepatitis Information Network*. Pointe Claire, QC

[52] Hellard, M., Crofts, N. & Hocking, J. (2004). *Hepatitis C Virus Among Inmates in Victorian Correctional Facilities*. Retrieved from http://www.justice.vic.gov.au/.
Ontario Ministry of Health (2006). *Assessment Guide for Hepatitis Risk Factors.* Toronto: Queen's Printer for Ontario
Public Health Agency of Canada (2004). Hepatitis C Virus Transmission in the Prison/Inmate Population. *Canadian Communicable Diseases Report, 30 (16).* Retrieved from http://www.phac-aspc.gc.ca/.
Salcido, R., & Chen, L. (n.d.). *Hepatitis A, B, and C Prevention Programs: Information and Programs for Adults and Adolescents at Risk.* Carson City, NV: Nevada State Health Division and Nevada Department of Corrections.
Thaisri, H., Lerwitworapong, J., Vongsheree, S., Sawanpanyalert, P., Chadbanchachai, C., Rojanawiwat, A., et al. (2003). HIV Infection and Risk Factors among Bangkok Prisoners, Thailand: A Prospective Cohort Study. *BMC Infectious Diseases, 3 (25).*

[53] Public Health Agency of Canada (2004). Hepatitis C Virus Transmission in the Prison/Inmate Population. *Canadian Communicable Diseases Report, 30 (16).* Retrieved from http://www.phac-aspc.gc.ca/.
Thaisri, H., Lerwitworapong, J., Vongsheree, S., Sawanpanyalert, P., Chadbanchachai, C., Rojanawiwat, A., et al. (2003). HIV Infection and Risk Factors among Bangkok Prisoners, Thailand: A Prospective Cohort Study. *BMC Infectious Diseases, 3 (25).*

[54] Tepper, M. (1998). The Epidemiology of Hepatitis C in Canada. *The Hepatitis Information Network.* Pointe Claire, QC.

[55] Federal sentences are those that are comprised of two or more years.

Questions were incorporated into the semi-structured interview that asked inmates to self-report on their incarceration history, drug abuse history, tattoos and infection status (HIV, HCV, HBV). Only items that could be approximated with CSC's Offender Management System (OMS) were included in the self-reporting procedure. Thus, inmates were not asked to report on their sexual practice histories.

4. The IRP was then validated on the interview sample, and the approximated items were tested.

Using the interview sample, Chi-square analyses were conducted to assess whether inmates with a previous federal incarceration and either a history of frequent drug use and/or a previous tattoo were more likely to report they had HIV or Hepatitis. Results revealed that those who rated high risk of having a blood borne infection by the IRP were more likely to be infected than those who were not rated as such (51.3% vs. 12.4% respectively, χ^2 (1, n = 108) = 12.36, p<0.001). Similarly, those with a blood borne disease were more likely to rate high on the IRP (60.6% vs. 25.3% respectively, χ^2 (1, n = 108) = 12.36, p<0.001).

As part of CSC's intake assessment process, indicators regarding inmate substance abuse histories are collected at admission. Although the process identifies whether inmates had a history of frequent drug use, the process does not ascertain whether inmates have a history of injection drug use upon admission. Thus, as part of the evaluation interview, inmates were asked to self-report both indicators (history of frequent drug use and injection drug use). Each indicator was correlated with the OIA proxy to ascertain whether the OIA indicator is an appropriate proxy of injection drug use amongst this population. Results showed that those who reported a history of frequent drug use during the interview interviewed were more likely to have also reported injecting drugs (46.0% vs. 9.5% respectively, χ^2 (1, n = 108) = 9.5, p<0.01). Thus, the IRP appears to be a valid proxy indicator of risk for blood borne disease.

5. The IRP items were then approximated, applied and tested for a larger inmate sample using CSC's automated data, the Offender Management System (OMS).

Three OMS items were used to approximate the identified risk factors. They were i) previous federal term; ii) history of frequent drug use; and iii) previous tattoo. If inmates reported they had a previous federal term and either (or both) of the other two items above, they were designated 'high risk' of having the infection. Otherwise, they were rated 'low risk'. For all new admissions to federal custody between January 1st, 2001 and August 31st, 2006 (N=23,978), 25.2% were rated as high risk on the IRP. Those who were rated to be at high risk of having a blood borne infection were more likely to have been taking medication upon admission than those not rated high risk (28.7% vs. 22.2% respectively, χ^2 (1, n = 20,938) = 114.6, p<0.001), and were also more likely to be identified as having health concerns requiring immediate attention (30.2% vs. 23.9% respectively, χ^2 (1, n = 20,745) = 65.1, p<0.001).

2.3.2 Semi-Structured Interviews

Semi-structured interviews were used to facilitate the collection of information and to provide stakeholders the opportunity to identify issues that may not have been considered prior to the evaluation. Participation in interviews was solicited by way of a request to contribute information relevant to the evaluation through telephone interview or face-to-face meetings. Unique interview formats were developed for each of the stakeholder groups; CSC staff members including union representatives, inmates, and community contacts. Interviews were structured such that they addressed the following evaluation objectives: i) relevancy, ii) success, iii) cost-effectiveness, iv) implementation and v) unintended effects[56]. Questions were designed such that responses were open-ended, categorical, dichotomous, or rated along a five point scale[57].

2.4 Procedures

Interviews were conducted by the evaluation team either in person or by telephone during the months of August and September, 2006. The interview process included site visits to each of the pilot sites. Key sources who were unavailable at the time of the site visit, or who were not physically located at the sites, were contacted by telephone and subsequently interviewed. Interviews were approximately 20 to 30 minutes in duration.

Qualitative data generated as a result of the interview process were entered into Microsoft Word and organized by different stakeholder groups. Themes relevant to the evaluation objectives were then generated by evaluation analysts. Similarly, quantitative data were entered into a Microsoft Excel spreadsheet, and then converted and analyzed electronically using a Statistical System Analysis (SAS).

Information from the Tattoo Room Movement and Tool Control forms and the Request for Tattoo forms was entered into a spreadsheet table, then converted and manipulated electronically using SAS. From this information, databases were created that would facilitate various types of analyses: the “tattoo client” data base identified inmates who received or were waiting to receive

[56] See Appendix 2 for the Evaluation Matrix.
[57] See Appendix 3 for key informant interview formats

a tattoo through the STPI, and the "summary" data base contained one unique record for clients for profiling purposes.

Financial information regarding the STPI was obtained from CSC's automated comptrollership system. Costs associated with treating inmates for HCV and HIV were collected through CSC's Infectious Disease Surveillance System (IDSS), infectious disease nurses and regional pharmacists via telephone interviews.

2.5 Analyses

The evaluation team conducted qualitative analyses for open-ended interview questions, through content analysis of the interview responses, which resulted in the identification of themes. Themes were generated for evaluation objectives where appropriate (relevancy, success, cost-effectiveness, implementation issues and unintended effects). These results are presented in the Key Findings section.

Quantitative methods were used to profile the STPI clients, and the IRP was used on a larger sample of inmates for similar purposes. Specifically, chi-square analyses were used for within group analyses on categorical variables (IRP rating).

Cost-effectiveness analyses were used to determine whether the STPI was a cost-effective approach to achieving results. Cost-effectiveness analysis is a decision-oriented tool that simultaneously considers costs and effects. It is more cost-effective if one operation yields the same level of effectiveness as others for lower cost[58]. Cost comparisons were also conducted under hypothetical scenarios to establish whether there was a more efficient alternative of producing the same level of results.

2.6 Limitations

Limitations of the present study were related primarily to the difficulty of obtaining health-related information on blood borne infectious diseases for inmates, as well as the self-selection

[58] Levin, H.M. & McEwan, P.J. (2003). Cost-effectiveness analysis as an evaluation tool. In Kellaghan, T. & Stufflebeam, D. L. (Eds.), *International Handbook of Educational Evaluation.* Boston: Kluwer Academic Publishers.

of interview participants based on the voluntary nature of the evaluation interviews. Approximately 30% of all inmates receiving or waiting to receive a tattoo through the Initiative were interviewed (114 of 384). With respect to health-related information, one of the limitations of the current evaluation was related to the inability to determine the precise incidence rate of HIV and Hepatitis among the inmate population. The only way in which to obtain accurate, valid information regarding these incident rates would be to conduct a seroprevalence study (i.e., blood tests to determine presence of the diseases). This was not possible for two reasons: 1) ethical issues associated with privacy (e.g., obtaining consent for offenders to take a blood sample or review medical health records for blood borne infectious disease information); and 2) the amount of time that it would take to collect this data for all inmates participating in the safer tattooing program.

To address this limitation, the Infection Risk Profile (IRP) was developed to obtain an indication the degree of infection with blood borne diseases among the inmate population. However, it is important to note that this measure provided an indication of "risk" for blood borne infectious disease, not an actual indicator of the presence or absence of a blood borne infectious disease. It is quite possible that inmates at high risk for infection might never in fact contract a blood borne disease. For example, they may have practiced harm reduction procedures even while engaging in risky behaviours (e.g., using sterile needles when injecting drugs), and thus never have contracted HIV or Hepatitis. Similarly, some low risk inmates may have contracted HIV through practices such as risky sexual behaviour, which was one risk factor which could not be approximated utilizing the IRP in the present study.

Results of the current evaluation provided support for the validity of the IRP (i.e., inmates with a high IRP score were more likely to report infection with either HIV or Hepatitis during the evaluation interviews). However, it is important to note the biased nature of the interview sample for the present evaluation (i.e., inmates who were interested in obtaining tattoos, who volunteered for the study, and who were available at the time of the evaluation). Ideally, the measure would have been validated on a random sample of all CSC inmates to ensure the validity of the measure. This was not possible given the timeframes of this evaluation, but should be considered for any future evaluations.

Next, it is important to discuss possible selection biases in the interview samples. Staff and inmates were selected for interviews based on their interest and availability. Therefore, only inmates who were incarcerated during the time that interviews were conducted were able to participate in the interview phase of the evaluation. Also, due to the fact that interviews were voluntary, it is likely that staff and inmates who had a high degree of interest in the pilot Initiative volunteered to participate. Nonetheless, attempts were made to ensure participation by a broad spectrum of staff and inmate participants.[59] Participants interviewed included the following groups: Wardens/Deputy Wardens, Assistant Wardens Correctional Programs (AWCPs), Institutional Services Supervisors, Unit Managers, Security Intelligence Officers, Security Maintenance Officers, Finance Officers, Inmate Pay and Program Clerks, Regional Chiefs of Health Services, Co-Chairs of Health and Safety, Local Union Representatives, Psychologists, Behavioural Councillors, Regional Health Coordinators, Correctional Supervisors, Correctional Program Officers, Institutional Search Coordinators, Program Managers, Program Assistants and Facilitators, OMS Specialists, Teachers, Team Leaders, Chaplains, Institutional Parole Officers, Inmate Committee Chairs, Inmate Tattooists, Inmate Tattoo Apprentices, and Inmates on a waiting list to receive a tattoo.

When examining and comparing trends of tattoo contraband seizures per 100 inmates, it should be noted that contraband seizure rates at institutions with small populations will be more sensitive than those at institutions with larger populations. Further, trends are examined over a finite time period, and given the low base rates they could significantly change with the addition of more observations in the future.

Finally, the evaluation report is limited in that it was not feasible to assess the impact of the STPI on offender reintegration given the limited follow-up time available. A longer time period for follow-up would have been required to examine whether there was an impact on a number of

[59] Prior to the site visits, a memo was sent to the Wardens at the pilot institutions requesting that interviews be conducted with a broad range of stakeholders including: Wardens, Assistant Warden Correctional Programs, Security Intelligence Officers, Health Services employees, local Union representatives, Correctional Officers, Social Program Officers, Tattooists, Inmates (who had received tattooing services or were on the waiting list).

reintegration factors, such as: successful discretionary release, time in the community and job placement. Thus, long-term follow-up should be considered in future evaluations.

3.0 KEY FINDINGS

The following results are presented under their respective Evaluation Objectives, namely:
1) Success (effectiveness and efficiency), 2) Cost Effectiveness, 3) Implementation, 4) Unintended Findings and 5) Continued Relevancy.

Objective 1: Success:

Effectiveness:

The extent to which a policy, program, or initiative is meeting its planned results.

- ***FINDING 1: The Initiative has resulted in an enhanced level of knowledge and awareness amongst staff and inmates regarding blood borne infectious disease prevention and control practices.***

A significant element contributing to the reduction in risk of infection among inmates, staff, and the community was the education of inmates regarding safer tattooing practices. As part of the Safer Tattooing Practices Initiative, information was disseminated through the Reception Awareness Program, the Peer Education and Counselling Program and the STPI Guidelines. Each education delivery method is discussed below. For a detailed description of the information that was disseminated, please refer to the Safer Tattooing Guidelines.[60]

The Reception Awareness Program (RAP)

The first point of contact for the education of inmates regarding tattooing practices occurred during intake, through the Reception Awareness Program (RAP). In addition to the provision of information regarding blood borne infectious disease prevention and control, the RAP was modified to include information on the health risks associated with tattooing.

In order to determine if the level of knowledge surrounding these health risks had changed as a result the educational Reception Awareness Program, inmates were asked to complete a questionnaire measuring their knowledge of blood borne infectious disease as it relates to

[60] The Safer Tattooing Guidelines are available through CSC's Infonet.

tattooing practices both before and after taking part in the Program. Overall, 599 of approximately 978 inmates completed the pre and post questionnaires. Please note that the total number reported with respect to the pre and post questionnaires include only offenders who provided an answer to each specific question. Consequently, total number of respondents might differ from one question to the other.

Inmates were significantly more likely to rate sharing of tattoo rigs, needles, and inks as being a health risk after the RAP program as compared to before. Specifically, inmates were asked to rate the level of risk ('no risk', 'low risk', or 'high risk') associated with these three elements of tattooing: sharing of tattoo rigs, sharing of tattoo needles, and sharing of tattoo inks. Chi-square tests for independence found significant differences between pre and post measures of risk awareness for sharing of tattoo rigs (87.5% vs. 95.1%, χ^2 (3, N = 1133) = 19.93, p = .0002) and sharing of tattoo needles (92.9% vs. 97.0%, χ^2 (3, N = 1130) = 12.99, p = .0047). The RAP appeared to be most informative when it came to informing inmates of the risks associated with sharing of tattoo inks. Where 83.5% (N = 492) of those surveyed thought that sharing inks was high risk prior to the Program, 94.4% (N = 506) thought it was a high risk practice after the RAP (x^2 (3, N = 1125) = 34.01, p < .0001)[61].

Inmates were also asked to indicate pre and post RAP, which infectious diseases could be acquired by using unsafe tattoo equipment. Although no significant differences were found between pre and post tests on knowledge regarding the transferal of HIV or Hepatitis C, the large majority of inmates recognized that these diseases could be spread through unsafe tattooing practices. Eighty two percent (N = 492) thought that HIV could be spread, and 86% (N = 528) realized that Hepatitis C could be spread through unsafe tattoo practices. Inmates were correctly aware that Hepatitis A was not something that was normally transmitted through tattoo practices, with a significant increase in this knowledge from pre to post test (49.6% vs. 60.1%, χ^2 (1, N = 1198) = 13.38, p = .0003), as was the case for Tuberculosis (73.8% vs. 83.8% respectively, χ^2 (1, N = 1198) = 17.99, p < .0001).

[61] Sample sizes vary as not all respondents answered all questions.

Finally, inmates were asked, before and after taking part in the Reception Awareness Program, if they would receive a prison tattoo, either from the range or through the Safer Tattooing Practices Initiative. No significant differences existed between pre and post test in the number of offenders who indicated they would get a tattoo in prison, however, the majority (post) indicated they would either not get a tattoo at all (55%, N = 290) or they would prefer to get a tattoo through the Safer Tattooing Practices Initiative (39%, N =206). Only 2% of inmates (N =523) indicated that they would get a range tattoo during their incarceration period. Therefore, only a very small percentage of inmates indicated that they would engage in high-risk tattooing behaviour following the presentation of the RAP session information.

Information Distributed at the Pilot Sites

A variety of educational materials surrounding the implementation, operation, and rational behind the Safer Tattooing Practices Initiative was provided to inmates and staff at each of the pilot sites. Among these documents were the Guidelines for the STPI (available to inmates through the library and to staff through CSC's intranet web-site), and various information and education pamphlets. In order to build on the information available, training sessions on the use of the guidelines were also provided to both staff and inmates prior to the implementation of the pilot.

When pilot site staff and inmates were asked to rate how satisfied they were with the educational materials that were provided, 69% of staff members who read the materials, and the majority (86%) of inmates indicated that they were satisfied with the information made available. In addition, 62% of inmates agreed that they felt more informed about how blood borne infectious diseases are spread as a result of the Initiative. Similarly, almost half (46%) of the staff members interviewed agreed that inmates are now more informed about how blood borne infectious diseases are spread. Although 17% of staff and 14% of inmates felt that the inmate population was not any more informed about how blood borne infectious diseases were spread as a result of the Initiative, it was observed by a number of the staff and inmate respondents that the inmates' knowledge had not been enhanced because they were already well-informed of infectious disease prevention and control practices. Both groups provided the caveat that even though this group of inmates did not acquire any additional knowledge, the educational material

available served as an excellent refresher. The evaluation team did not receive concrete suggestions for improvement of this material.

The STPI Guidelines

As previously mentioned, the STPI Guidelines were made available to staff prior to and throughout the Initiative through the CSC intranet site. Interviews with pilot site staff (N = 110) found that 62% of those interviewed had read the Guidelines for the CSC Safer Tattooing Practices Initiative. More specifically, of those that identified their positions, 83% of health care workers, 90% of social programs officers, and 54% of correctional officers had read the Guidelines. In general, staff who had read the guidelines commented that they were well thought out and provided clear, concise direction.

The Peer Education and Counselling Program (PEC)

Commissioner's Directive (CD) 821 - "Management of Infectious Diseases", notes that the PEC Program "… must be put in place at all penitentiaries with the exception of mental health units and reception units." Accordingly, the National HIV/AIDS Peer Education and Counselling Program (commonly referred to as "PEC") and Circles of Knowledge Keepers (Aboriginal PEC program) contain information on HIV/AIDS and other blood borne infectious diseases. These programs are intended to train inmates to become "peer educators" who provide support and information on blood borne infectious diseases to other inmates, and are offered at various times throughout the year on an as-needed basis. The "Women's Component" of PEC contains additional information related to how HIV/AIDS and other blood borne infectious diseases affect women in particular.

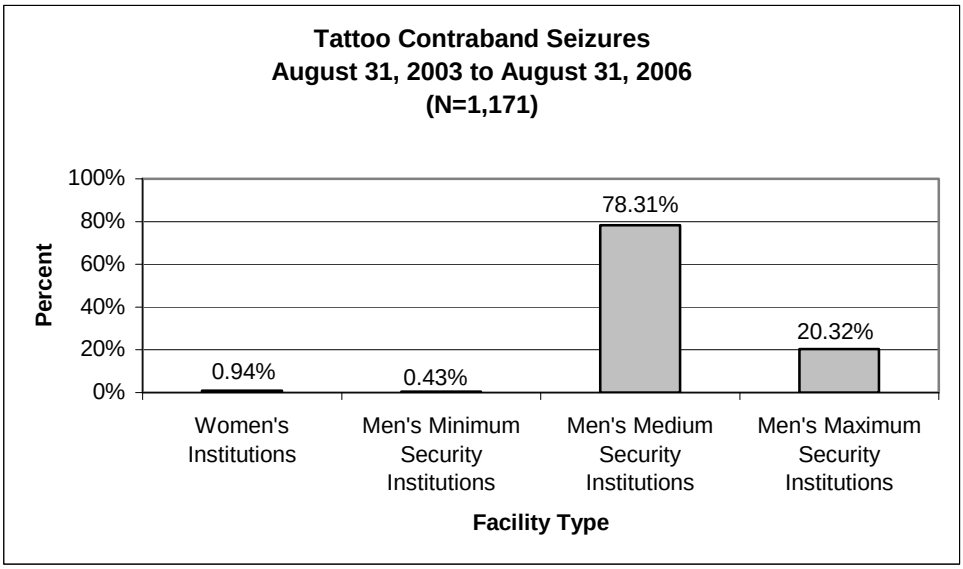
RECOMMENDATION 1: To maintain an enhanced level of knowledge and awareness of infection prevention and control practices, CSC should continue the education component of the Safer Tattooing Practices Initiative.

- ***FINDING 2: Initial results of the initiative indicate potential to reduce harm, reduce exposure to health risk, and enhance the health and safety of staff members, inmates and the general public with higher risk groups (medium and maximum security institutions for male offenders).***

Illicit Tattooing: Site-Specific Trends

The practice of illicit tattooing is most evident in men's medium security institutions, as indicated by the number of seizures of tattoo contraband. A review of the total number of tattoo contraband seizures since August 31st, 2003 (N=1,171) revealed that the majority of seizures occurred at medium security men's institutions (78.3%), followed by maximum security (20.3%), while less than 1% occurred at men's minimum and women's institutions respectively (see Figure 1).

Figure 1: Seizures of Tattoo Contraband by Gender and Security Level



This finding also held for the STPI pilot sites. Specifically, at Fraser Valley Institution for Women and Rockwood Institution (men's minimum security), there was little indication that inmates were tattooing on the range prior to the Initiative. In the two years prior to the Initiative, there were virtually no seizures of tattoo contraband at both institutions.[62] Conversely, seizures of tattoo contraband at men's medium and maximum security pilot sites typically fluctuated between 0 and 4 seizures per 100 inmates per month over the same time period (see Figure 1).

The above trends were confirmed by staff and inmate-reported incidence of range tattooing. Of those interviewed at women's and men's minimum security pilot sites, 50% of staff and 65% of

[62] Only includes those known seizures reported on CSC's Offender Management System.

inmates indicated that there was little or no tattooing occurring on the range prior to the Initiative. On the contrary, at men's medium and maximum security pilot sites, 90% of staff and 75% of inmates indicated that range tattooing was in fact a reality at their institutions.

Finally, the variation in tattooing practices across security levels was also evidenced by results of the 1995 Inmate Survey. According to the 1995 Survey, 36% of all inmates (ranging from 24% in minimum security to 43% in maximum) reported feeling that they needed more help to protect themselves from HIV/AIDS. Of those who felt they needed more help, 32% felt they needed new and/or sterile tattooing equipment: 13% in minimum, 30% in medium and 41% in maximum security institutions.

Harm and Risk Reduction

As noted above, data suggests that the practice of tattooing on the range is more common at men's medium and maximum security pilot sites than at women's and men's minimum security institutions, suggesting that the exposure to the risk of infection with a blood borne disease is greater at those sites. Results also suggested that, during the Initiative, there was a reduction in illicit tattooing at medium security institutions.

Analyses compared the rate of tattoo contraband seizures at pilot sites compared to other similar institutions. During the Initiative, there was a reduction in illicit tattooing at medium security institutions (see Figure 2) as evidenced by the decrease in the level of tattoo materials seized. Moreover, seizure rates were increasing at other men's medium security institutions (non-STPI) over the same time period.

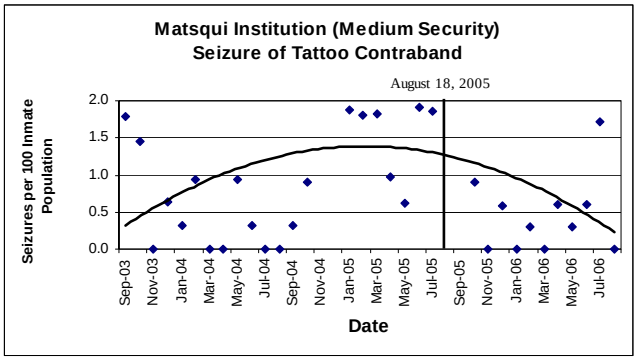
Next, at the men's maximum security pilot site (Atlantic Institution), rates of illicit tattoo materials seized remained steady (see Figure 2) while at other similar institutions these rates were slightly decreasing. The reason for the lack of the expected decrease in contraband seizures can not be clearly attributed to any known factors assessed in the current evaluation. However, it should be noted that the results obtained for the Atlantic Institution may have been impacted by the fact that the Initiative was only implemented within a section of Atlantic Institution, thus not

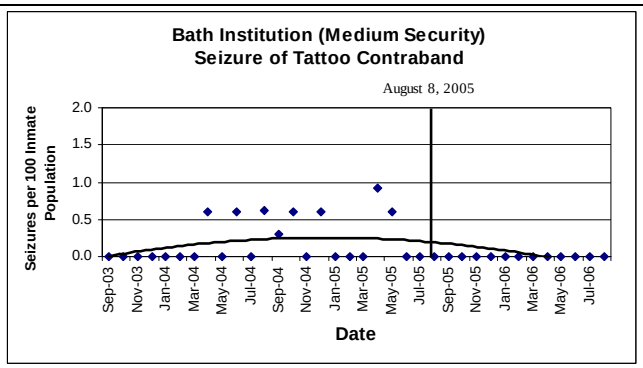
all inmates at the institution had access to the tattoo room. The evaluation team did not find an explanation for the slight decrease at other maximum security institutions.

Finally, at the men's minimum security pilot site (Rockwood Institution), seizure rates increased during the Initiative while decreasing at other minimum security institutions. The degree to which the Initiative may have impacted this trend should be examined in future evaluations. For women's institutions, the trend was next to 0 over the time period, so no chart was created to establish a trend over time.

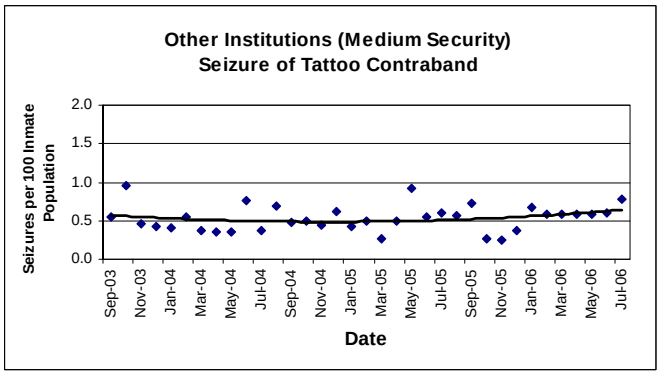
Figure 2: Tattoo Contraband Seizure Rates

Pilot Sites (Men's Medium Security Institutions)[63]





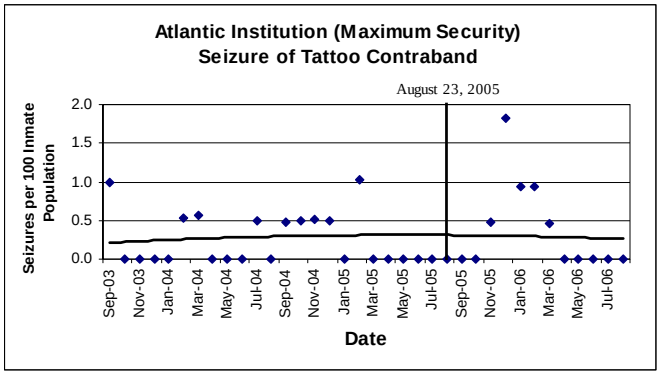
Other Men's Medium Security Institutions



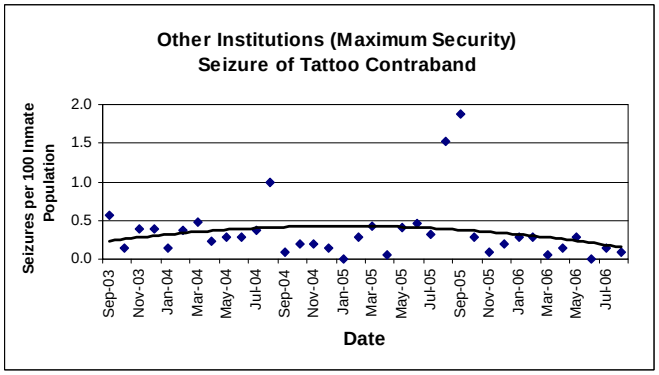
[63] Data were not available for Cowansville Institution.

Seizures of Tattoo Contraband (continued)

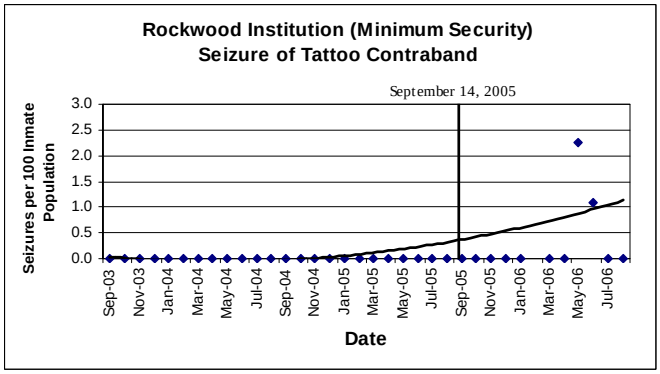
Pilot Sites (Men's Maximum Security Institution)



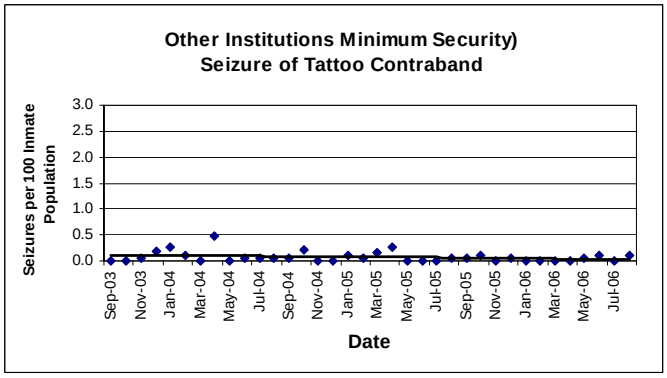
Other Men's Maximum Security Institutions



Pilot Sites (Men's Minimum Security Institution)



Other Men's Minimum Security Institutions



The above findings were also supported by data collected throughout the course of interviews with staff members and inmates at the pilot sites. Results are presented below.

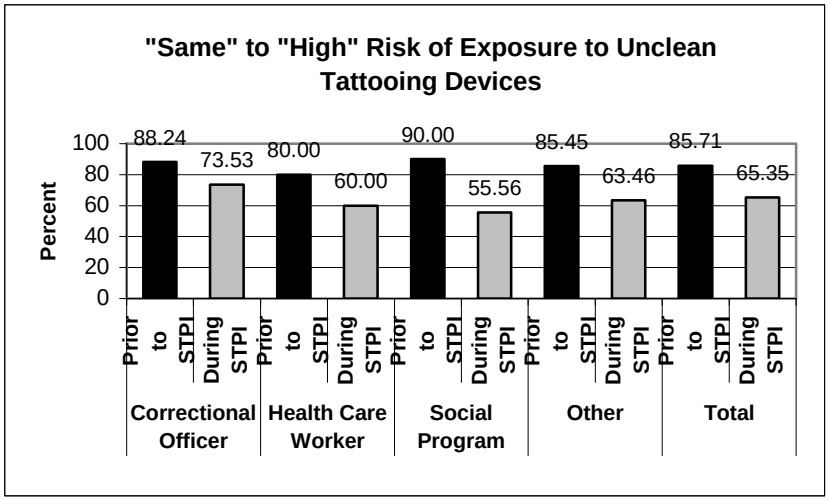
Staff Members

Overall, staff members were significantly more likely to indicate there was 'some' to 'high' risk of staff exposure to unclean tattooing devices *prior to* the STPI compared to *during* the Initiative (85.7% vs. 65.4% respectively, χ^2 (1, n= 206) = 11.6, p<0.001)[64]. Similarly, staff members were also more likely to indicate there was 'some' to 'high' risk of staff needle-stick injuries *prior to* the STPI compared to *during* the Initiative (81.9% vs. 64.1% respectively, χ^2 (1, n= 208) = 8.40, p<0.01) (see Figures 3 and 4).

[64] Refer to question 3, section A of the Staff Interview key, Appendix 3.

This finding did not hold for all sub-groups within the staff members interviewed. Although Correctional Officers indicated higher levels of exposure to risk *prior* compared to *during* the Initiative, the differences were not statistically significant.

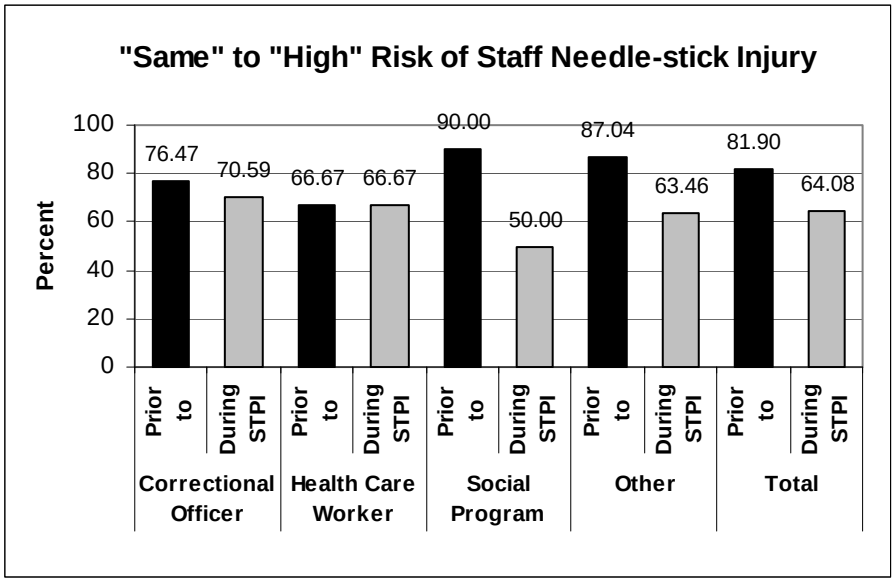
Figure 3: Staff Perceptions of Risk of Exposure to Unclean Tattoo Needles – Prior to and During the STPI



*See Footnote[65]

[65] *Note: "Other" includes staff members from the following groups: Wardens/Deputy Wardens, Assistant Wardens Correctional Programs (AWCPs), Institutional Services Supervisors, Unit Managers, Security Intelligence Officers, Security Maintenance Officers, Finance Officers, Inmate Pay and Program Clerks, Regional Chiefs of Health Services, Co-Chairs of Health and Safety, Local Union Representatives, Psychologists, Behavioural Councillors, Regional Health Coordinators, Correctional Supervisors, Correctional Program Officers, Institutional Search Coordinators, Program Managers, Program Assistants and Facilitators, OMS Specialists, Teachers, Team Leaders, Chaplains, Institutional Parole Officers.

Figure 4: Staff Perceptions of Risk of Exposure to Needle-stick Injury – Prior to and During the STPI



Analyses across institution type were also conducted. Interestingly, staff members at medium security pilot sites were significantly more likely to indicate higher levels of exposure to risk *prior* compared to *during* the Initiative (98.0% vs. 73.1%, χ^2 (1, n= 96) = 11.9, p<0.001 respectively for exposure to tattooing devices), while, for men's minimum and maximum security pilot sites and women's institutions, similar analyses did not yield statistically significant results.

Finally, when giving their opinions regarding the impact of the STPI on various outcomes, the vast majority of all staff members indicated they felt the Initiative helped to decrease the likelihood that people will contract HIV and HCV/HBV (85.6%). Most staff members also indicated that they felt the Initiative made the institution safer for both staff members (64.8%) and inmates (72.4%). Interestingly, although many staff agreed that the Initiative decreased the number of tattoos that inmates receive on the range (60.4%), many also indicated that they felt the number of seizures of tattoo paraphernalia has not changed as a result of the Initiative (60.5%).

Inmates

Most inmates indicated they would prefer to receive a tattoo through the safe and controlled environment created via the Initiative (87%). Inmates also felt that other inmates were willing to use the Initiative in the institution (77.1%). Lastly, over two-thirds of inmates interviewed felt the Initiative decreased the chances that someone would get a range tattoo (67.3%), and most indicated that they felt the STPI had caused a decrease in range tattoos (78.9%) and in HIV or Hepatitis cases (88.0%).

The vast majority of inmates interviewed who reported they *were* infected with HIV and/or HCV/HBV (N=32) indicated they would prefer to use the STPI tattoo room rather than get a tattoo on the range (93.8%). Notably, 11 of those reporting they were infected with a blood borne disease also indicated they had previously injected drugs in prison.

Similarly, most inmates who reported they did *not* have a blood borne infection also indicated they would prefer to use the STPI tattoo room rather than get a tattoo on the range. There were a total of 73 inmates who reported they were tested and not infected with HIV or HCV/HBV. Of the total who responded, 83.6% indicated that they completely agreed with the statement "I prefer to use the tattoo room rather than get a tattoo on the range".

⌗ *FINDING 3: The Initiative provided additional employment opportunities for inmates in the institution, and work skills that are transferable to the community.*

Over the course of the Safer Tattooing Pilot Initiative, 23 inmates were employed as tattooists/apprentices at various pilot sites. Of those, 13 participated in the evaluation interviews[66] and reported anywhere from 2 to 12 months of employment through the Initiative in one of these positions. The majority of staff (53/77; 69%) also indicated a high degree of perceived work satisfaction among tattooists and apprentices employed through the Initiative[67].

A number of interviewees also spoke to the fact that the Initiative provided an opportunity for tattooists to gain training/experience in a skill area which might facilitate employment - not only within the institution but also in the community. Some tattooists and apprentices (31%)

[66] The remaining 10 inmates were either not available or did not participate in the evaluation.
[67] See question 2a Section B of the Staff Interview key, Appendix 3.

discussed the impact of the tattooing initiative in supporting goals related to reintegration (e.g., providing a valid career option, impact of gainful employment on reducing recidivism). Similarly, some inmates (10%) and staff (9%) commented upon the impact of the program in developing employability skills and employment opportunities for offenders in the institution, as well as providing an avenue for potential employment upon release to the community. However, considering the limited opportunity for follow-up, it was not possible to establish success in providing a career in the community to inmate tattooists.

Efficiency:

The extent to which a policy, program, or initiative is producing its planned outputs as a result of the Initiative and in relation to resources used.

- ***FINDING 4: Tattooing activities at most pilot sites were constrained due to the limited number of trained Tattooists.***

As previously outlined, STPI tattooing services were provided by inmate tattooists who had successfully completed training on infectious diseases and infection prevention and control practices. Most pilot sites, however, experienced program constraints due to unavailability of tattooists, despite interest on the part of inmates to become a tattooist through the Initiative. The limitation in the number of available trained tattooists added to a delay in tattooing, and was generally due to two factors: the availability and demands surrounding training, and the turnover of Initiative tattooists. On average, inmates reported a wait time of 58 days to obtain their tattoo from the day that they first applied; a time period that ranged from 1 to 230 days, depending on the institution.

As previously described, in order to become a tattooist in the Safer Tattooing Practices Initiative, inmates were required to complete the Peer Education and Counselling (PEC) Program. In many cases, completion of this program was problematic for inmates. When interviewed, 7% of respondents commented on the demanding nature of the PEC program, both in terms of inmate time demands and staff time demands. Initiative tattooists and inmates noted that the program was too long and that it required them to learn information that was irrelevant for their roles as

tattooists (e.g., the PEC program being designed to train inmates to act as liaisons between other inmates and nursing staff).

In addition, interviewees commented that the lack of availability of the PEC program itself made it difficult for the Initiative to maintain tattooists. The PEC program requires significant classroom time (approximately 45 hours), and may or may not require outside resources (contractors) to administer the program. Several staff members commented that the time required to coordinate, administer, and complete the PEC program was not conducive to keeping an active tattooist in the Initiative, especially if the institution was faced with inmate turnover. This sentiment was commonly reflected in observations such as:

> "The PEC training program is too long (it could be done in 1 or 1.5 days rather than two weeks). This is too much program for tattooists; they don't need to be trained as counsellors."

The lack of availability of Initiative tattooists was a concern voiced at many of the pilot site institutions, with a few exceptions. Although many inmates (45%) indicated that they were "very satisfied" with the availability of the tattooists and apprentices, they later expressed some concerns in this regard. For instance, 39% of inmates noted that there were too few tattooists, specifically trained tattooists. Many staff members also noted the lack of tattooists, indicating that there "should be more tattooists, it could help reduce range tattoos". The average turn-over rate at men's pilot sites was 3, and at the women's pilot site it was one. In several cases, Initiative tattooists were released from the institution during the pilot. In other cases, tattooists were fired from their work in the Initiative, or had to leave their post for other reasons (i.e., being segregated). Each time an Initiative tattooist was not available to work in the tattoo room, there would be a break in tattoo services. This had serious implications for ensuring ongoing accessibility to the program and for range tattooing. If for any reason the tattooist was no longer in the position and there was no back up available, the shop would remain closed until a replacement could complete the PEC program. In some cases, inmates sought tattoos (or completion of tattoos initiated in the shop) on the ranges. Respondents noted that while they would have preferred to receive (or have the tattoo finished) in the shop, given the length of the

wait time for the STPI and the availability of range tattooists, they chose the non sanctioned but readily accessible route.

- ***FINDING 5: Tattooing hours of operation were sporadic at some sites, and thus had an impact on the number of tattoos administered.***

Under the Guidelines for the STPI, direct supervision of the tattoo room was essential at the beginning and end of each tattoo session, as well as at intervals within the operational period. These responsibilities, along with many others, fell to the Social Programs Officers (SPO) at the pilot program sites. Specifically, as per the Guidelines, all SPOs were to be able to manage the tattoo room, with one SPO ultimately responsible.

Although some sites were able to distribute the responsibilities of the tattoo room across several individuals, in most cases only one SPO was charged with the management and operation of the tattoo room. This meant that when that particular individual was away from work, the tattoo room could not operate. When asked how the Initiative could have been improved, 32% of responding inmates commented that the Initiative would benefit from additional staff capable of undertaking the tattoo room duties. Twelve percent of staff and 18% of inmate respondents noted that often, the work schedule of the SPO (day shifts, for example) did not coincide with most effective times to operate the tattoo room, and thus the room operated at limited hours or was often closed. Interestingly, these respondents linked this lack of room availability directly with the persistence of range tattooing in the institution. Respondents suggested that expanding the number of staff members who could take responsibility for the tattoo room would allow for the room to function at other times (on evenings and weekends, for example). As one respondent noted:

> "… need another SPO to assist in getting the shop running. (SPO's name) is very good, but [they are] at the limit of what [they] can do. They definitely need another staff member involved …".

The above comment also addresses another element which contributed to the sporadic times allotted for tattooing: the element of day-to-day institutional operations. In institutions where different populations required different movement schedules and meal times, scheduling

extended blocks of time for the tattoo room to function uninterrupted was a challenge, leading to a decrease in Initiative efficiency. A direct result of a decreased capacity to perform tattoos is an increase in the waiting time required to get a tattoo through the Initiative. On average, 22% of respondents (tattooists, inmates, and staff) mentioned that the wait list to get a tattoo through the Initiative was too long and that this had a direct impact on the amount of range tattooing occurring in the institution.

Objective 2: Cost Effectiveness:

Cost-effectiveness determines the relationship between the amount spent and the results achieved relative to alternative design and delivery approaches.

- ***FINDING 6: The cost of the Safer Tattooing Practices Initiative is low respective to the potential benefit.***

As a harm reduction initiative, the STPI seeks to decrease the spread of blood borne infectious disease among inmates, staff members, and the community at large – thus decreasing the overall costs of medical treatment. In 2005, CSC recorded $2,645,134.00 in HCV related expenditures.

Taking into consideration the cost of such treatment, the STPI is cost-effective if one of every 38 tattoo sessions were to result in an 'avoided' HCV infection, or if one of every 50 tattoo sessions resulted in an avoided HIV infection. Moreover, the Initiative is cost effective if one out of 248 sessions results in an avoided liver transplant. These estimates were calculated as follows (Table 2):

Table 2: Cost-Effectiveness

1) Ongoing Cost of STPI for one year:	$603,038.53
2) Number of Tattoo Sessions	1,043.00
3) Cost per Tattoo Session	$578.18
4) Cost of HCV Treatment:	$21,993.00
5) Cost of HIV Treatment	$29,000.00
6) Cost of Liver Transplant:	$121,732.00
Ratio of HCV Costs to Tattoo Room Session Cost (4)/(3)	**38:1**
Ratio of HIV Costs to Tattoo Room Session Cost (5)/(3)	**50:1**
Ratio of Infection and Liver Transplant Costs to Tattoo Room Session Cost [(4)+(6)]/(3)	**248:1**

The ongoing cost of the STPI for one year was $603,038.53. Over the course of the Initiative, there were 1,043 tattoo sessions in total. As such, the cost per tattoo session was approximately $578.18. The yearly cost associated with the initial treatment of inmates with HCV is approximately $21,993.00 [68]. Thus, the ratio of HCV treatment costs to the cost of tattoo session is 38 to 1. Similarly, the cost associated with the treatment of an inmate with HIV is approximately $29,000.00 per year. Unlike HCV, this is an on going annual cost. Thus, the ratio of HIV treatment costs to the cost of tattoo session is 50 to 1. Lastly, the average cost of a liver transplant has been estimated to be $121,732.00[69], and the ratio of the cost of a liver transplant resulting from HCV infection to a tattoo session is 248 to1 (includes costs of HCV treatment).

Finally, it is important to note that the above cost calculations do not include the post-treatment costs of ongoing diagnostics, monitoring, medication, or nursing and specialists' costs. Similarly, indirect costs were also not considered in the calculation. Indirect costs include the human costs associated to having a blood borne infectious disease, productivity and tax loses, and increased pressure on social support networks.

[68] Costs include antiviral medications, supplements for side-effects of anti-viral medications, vitamins and blood work costs. (Information source: Health Service Branch, CSC.)

[69] As reported in *Canadian Journal of Surgery* (2002;45[6]:425-34).

Objective 3: Implementation:

This evaluation objective ascertains whether the Initiative is organized or delivered in such a way that goals and objectives can be achieved. This involves appropriate and logical linkages between activities, outputs, outcomes and long-term outcomes.

FINDING 7: Implementation issues, such as the tattooist skill level, and training and availability of tattooists, negatively impacted the effectiveness and efficiency of the Initiative.

Tattooist Skill Level, Training in the Art of Tattooing, and Availability

Among the interviewees who had worked as either tattooists or apprentices as part of the Safer Tattooing Practices Initiative, only one-third had prior experience as a tattooist in the community (4/12; 33%). A greater number of tattooists/apprentices reported some experience as a "range tattooist" during the current, or a previous, incarceration (8/12; 67%). Overall, one-third of tattooists employed through the Initiative (4/12; 33%) did not report any specific experience providing tattoos to clients in the community or while incarcerated.[70]

The majority of inmates employed through the Initiative (tattooists, apprentices, clerks) reported that they were very satisfied with the training that was provided by CSC (62%), and most felt that they received enough training to do the job (77%). Similarly, most inmates who responded to this question agreed[71] that the tattooists received enough training to do their jobs (79%).

Although a majority of inmates seemed to perceive that the tattooists received enough training, there were some issues raised by both inmates and staff with respect to the skill level and quality of some of the tattoos provided through the Initiative. For example, interviewees were asked why they thought that inmates might still be receiving range tattoos, even though they were able to receive tattoos through the Initiative. Some tattooists (9%), inmates (7%), and staff (24%) who responded to this question indicated that one of the reasons might be that the inmates "preferred" a range tattooist to the program tattooist for various reasons (e.g., range tattooists

[70] However, one of these tattooists did report that although he had not provided tattoos to others, he had tattooed himself numerous times.

[71] Agreement here represented all those who selected "4" or "5" on a 5-point scale, with higher scores representing greater agreement with the statement.

were better artists or had a preferred "style" of tattooing). For example, one staff member reported that there were still some really good range tattooists who were trusted and liked. Other interviewees suggested that there were some cases where inmates did not like the Initiative tattooist, his art, or style, and so would choose to get a tattoo from an inmate on the range instead.

Thus, although respondents appeared to be satisfied with the training provided by CSC, there were still some instances in which the style or quality of work provided by the Initiative tattooists was called into question. It is possible that this may have more to do with innate artistic abilities and degree of past tattooing experience than with any level of direct training that can be provided for this type of artistic work.

Cost of Supplies

When asked whether there was anything that could be done to improve the Initiative or if there was any way that the Initiative could be run at a lower cost without jeopardizing it, many respondents suggested that supplies were too expensive and that costs could be reduced in this area. This theme was particularly prevalent in the comments of tattooists/apprentices (7/13; 54%), but was also mentioned by some other inmates (8/114; 7%) and staff members (15/110; 14%) as well. Some of the more common suggestions were related to the reduction of tattoo related supply costs through: purchasing materials from more than one supplier, buying reusable rather than disposable materials where possible (e.g., stainless steel nozzles), and ordering larger, bulk quantities of ink (rather than the individual ink packets).

FINDING 8: Enhancements to the current delivery model could address many of the implementation issues in a more cost effective and efficient manner.

Given the implementation issues presented above and the suggestions for improvements to program delivery and cost effectiveness indicated by staff and inmates, a number of enhancements could be made to the current delivery model to facilitate cost effectiveness and efficiency. The proposed enhancements include, but are not limited to:

- *Revising the Peer Education and Counselling (PEC) training:* Revising the PEC training such that it is delivered primarily as a self-study module, requiring successful completion of a written exam would reduce staff resource requirements while increasing the pool of trained tattooists.

- *Training Correctional Staff to Operate the Tattoo Room:* Training correctional staff to operate the tattoo room would allow the room to function at hours not congruent with the SPO's schedule, to function when the SPO is not present at the institution, and would decrease the salary dollars required to operate the Initiative.

- *Purchasing of Full-Size Ink Bottles:* Purchasing larger ink bottles would require the Initiative coordinator to dispense a pre-specified amount of ink outside of the tattoo room and keep the bottles in their possession at all times. This option is the most cost effective and would eliminate the issue of limited suppliers for the currently used ink caps.

- *Increasing the Capacity of the Tattoo Room:* Increasing the number of tattooists able to work in the tattoo room at the same time would decrease range tattooing by increasing room efficiency and providing more choice of artists for clients. In addition, increasing the number of tattooists able to work at one time in the tattoo shop would allow more tattoos to be completed during a given session. Not only would this generate more revenue for the shop, but it would also maximize the salary dollars required to operate and supervise the program.

- *Consider Using Community Tattooist Services:* Random interviews were conducted with community tattooists across Canada (N=10). Interviews were designed to estimate service costs and establish the willingness of community tattooists to work with federal inmates. Results showed that the majority of community tattooists (70%) would be willing to perform and supervise tattooing in federal institutions. Only half indicated they would train inmate tattooists. Of those willing to provide tattoo services, many were willing to complete an Infectious Disease education self-study module, complete a written test on Infectious Diseases, and be monitored by a nurse in the set-up of the tattoo room (5 of 7).

Objective 4: Unintended Findings:

Unintended findings are areas wherein the Initiative created or encountered any positive or negative effects.

- ***FINDING 9: There was some perceived increase in the demand for tattoos, particularly at the women's multi-level and men's minimum security level pilot sites.***

Staff and inmates were asked whether "the Initiative had created a demand for tattoos that wasn't there before". The majority seemed to agree that there had been at least somewhat of an increase[72] in demand for tattoos: tattooists/apprentices/clerks (75%); other inmates (54%); and staff (61%).

Chi-square tests were also conducted to determine any differences between staff and inmate perceptions of increased demand at men's vs. Women's pilot site and as a function of institutional security level for the men's institutions. Only one significant difference was observed. A greater percentage of staff at the women's institution pilot site than at the men's institutions reported a perceived demand for tattoos that did not previously exist (100% vs. 45% respectively, χ^2 (1, n = 87) = 22.50, $p < 0.001$).[73] Finally, as noted earlier, seizure rates of illicit tattoo materials increased at the men's minimum security pilot site during the Initiative, suggesting the demand for tattoos increased as a result of the Initiative.

When respondents at women's multi-level and men's minimum security pilot sites were asked why range tattooing was or was not taking place, several noted that while there was not a problem with range tattooing prior to the program, they were seeing it more often now as the Initiative had increased the desire for tattoos among these populations.

[72] "Somewhat of an increase" was defined as those who selected "3 – 5" on the 5-point rating scale, with higher scores representing greater agreement with the statement.

[73] Chi-square tests were conducted to determine any differences between perceptions of increased demand at women's vs men's institutions, and as a function of institutional security level for both inmates and staff. Other than the significant difference observed between perceptions of staff at men's and women's institutions, no other significant differences were observed.

Overall, a few inmates (2%) and one-quarter of staff members (25%) discussed the issue of the perceived increase in awareness and demand for tattoos in greater depth at various stages during the interview. Many hypothesized about the reasons for the increase in demand, which most commonly included a perception that STPI tattoos were inexpensive as well as "cleaner" or "safer".

The perception that STPI tattoos were inexpensive is substantiated. As per the Initiative, inmates were charged $5.00 for a two hour tattoo session[74]. In the community, the estimated cost of a 2 hour tattoo session is $300.00. Comparing both prices as a proportion of disposable income revealed that STPI tattoo prices were lower than what the general public would pay in the community as a proportion of disposable income. As per CSC's Inmate Pay Scales, employed inmates currently receive a daily rate that is based on four levels ranging from $5.25 to $6.90 (Monday to Friday - max $69/two-week pay period). Inmates who are unable to work or for whom there is no work receive a daily allowance of $2.50. Inmates who refuse to work or to take part in their assigned programs receive a basic daily allowance of $1.[75] It is estimated that inmates are paid, on average, $4.00 per day[76]. At this rate, an inmate would have an annual disposable income of $1,040.00 ($40/2 week period x 26 periods). In the community, the Personal Disposable Income per capita (2002) is $22,268[77]. Thus, in order for inmate costs to reflect those in the community, inmates would be required to pay $14.00 per session (See Table 3).

[74] Note that this time period included set-up and take-down of materials in the tattoo room, which is estimated to take anywhere between 10 and 20 minutes for both.

[75] Sourced directly from CSC's InfoNet, and Correctional Service Canada (2003). *Commissioner's Directive 730*, s.17-20. Retrieved from http://www.csc-scc.gc.ca

[76] Estimated from CSC's 2002 budget and the average number of inmates incarcerated.

[77] According to Statistics Canada.

Table 3: Tattoo Cost Calculation as a percentage of disposable income (DI)

Annual Disposable Income:	
Community:	$22,268
Inmate (estimate):	$1,040
Cost of 2-hour Tattoo Session:	
Community:	$300
STPI:	$5
Cost of 2-hour Session as % of DI:	
Community:	1.35%
STPI:	0.48%
Required cost of an STPI Tattoo:	
equivalent % of DI	$14.01

Interestingly, based on interviews, inmates are paying three to five times more for the same session on the range. According to inmates interviewed who had received a tattoo on the range, most indicated they paid an average of two bales of tobacco ($13.78 each) for two hours of tattooing. A majority of inmates also indicated they prefer to use the services of the tattoo room as reported earlier. Thus, increasing the cost of a session may also eliminate the excess demand for tattoos that is driven solely by the low price. Finally, it is also likely that if the services offered through the Initiative met the needs of the inmates, they would be willing to pay more and not pursue tattooing on the range.

Objective 5: Continued Relevancy:

The extent to which the Initiative remains consistent with departmental and government-wide priorities, and realistically addresses an actual need.

FINDING 10: The Safer Tattooing Practices Initiative remains consistent with the goals and objectives of the Federal Initiative to Address HIV/AIDS in Canada.

The STPI was established in order to enhance CSC's role in maintaining a just, peaceful and safe society, and to assist in the government's overall agenda of improving the health, safety and quality of life of Canadians. As such, the goals and objectives of the STPI were designed to promote health and wellness, and to minimize the health and safety risks to CSC staff, inmates and the community at large while maintaining security.

Data indicate that the goals of the STPI continue to address an actual need. However, while the education component of the STPI remains relevant for inmates in all institutions, data indicate that the operational component is most relevant in medium and maximum security institutions, where the demand and the associated risk of blood borne infectious disease transmission through illicit tattooing is high.

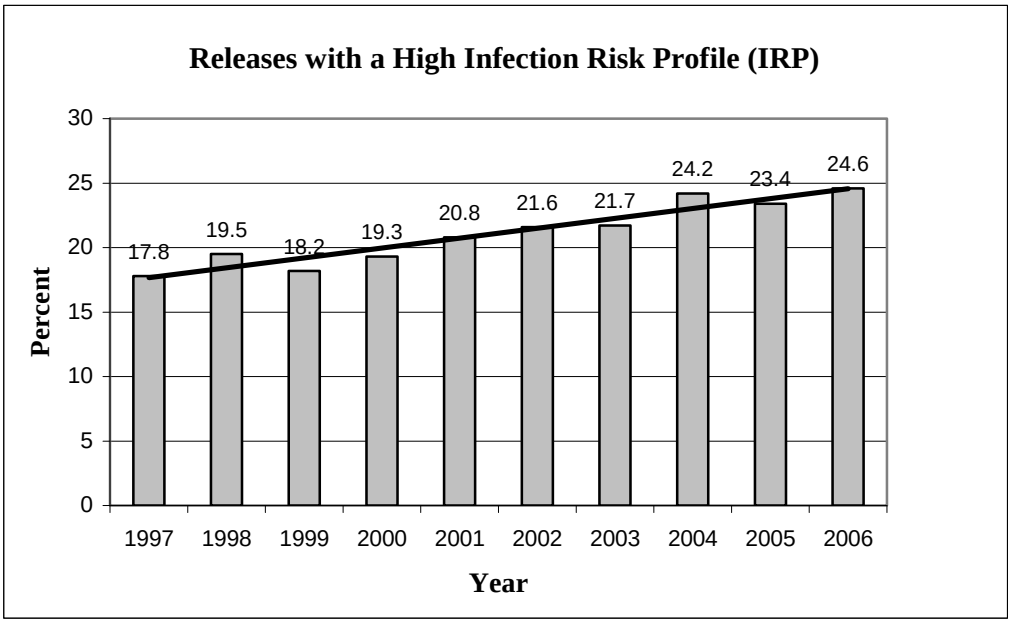
STPI Goal #1: Minimize the risk of transmission of blood borne infectious diseases in the inmate population and to the community at large.

Transmission of blood borne infectious diseases in prison remains a risk within the inmate population. Of those inmates interviewed for the purposes of this evaluation who indicated they were infected with HIV and/or Hepatitis (N=33), many had indicated involvement in high risk activities, such as injecting drugs (85%), injecting drugs in prison (57%), giving a range tattoo (36%), or receiving a range tattoo (87%).

Risk of blood borne infectious disease transmission extends to staff members and to the community at large. For instance, the proportion of inmates released to the community who are rated as being at high risk of having a blood borne infectious disease (as per their Infectious Risk Profile) has been increasing over time, from 17.8% in 1997 to 24.6% in 2006[78] (see Figure 5).

[78] Numbers as of August 31st, 2006.

Figure 5: IRP Release Trends



This evaluation reveals that there are strong indications of illicit tattooing in men's medium and maximum security institutions, as evidenced by rates of tattoo materials seized. Thus, given the potential for the STPI to reduce the practice of illicit tattooing, the Initiative continues to be a relevant harm reduction strategy at these sites if modified to better meet the needs of the inmates, particularly at medium security men's institutions where contraband seizure rates are increasing.

STPI Goal #2: Minimize the risk of CSC staff injuries

Potential injury and infection to CSC staff members from illicit tattoo materials has remained a risk over the past 10 years. Between 1997/98 and 2005/06, there were a recorded 44 staff needle stick injuries due to illicit tattoo materials. Further, as evidenced by the seizure rates of illicit tattoo materials, range tattooing remains prevalent in federal institutions, particularly in men's medium and maximum security facilities. However, data provided related to finding #2 indicates that there was a reduction in contraband seizures, at least at medium security institutions during the STPI. Thus, the STPI demonstrates continued relevance, in that it shows the potential to minimize the risk of staff needle stick injuries through a possible reduction in illicit tattooing materials and the preference expressed by inmates for the STPI over illicit range tattooing.

STPI Goals #3 and 4: Educate inmates regarding the transmission of infectious diseases associated with illicit tattooing, and promote health and wellness while maintaining security.

As indicated through the pre-post knowledge tests administered upon intake, there is a need to inform inmates with regards to the risks of illicit tattooing in prison (see Finding #1). Specifically, the pre-post knowledge tests revealed that inmates were more informed about risks of sharing tattoo rigs, needles and inks after receiving the knowledge component of the Initiative.

⌗ *FINDING 11: There is a need for more information regarding inmate infectious diseases and risk behaviours in order to adequately evaluate future harm reduction initiatives.*

National data regarding federal inmates' histories of infection, risk behaviors, and sociological and cognitive factors will assist in situating the Safer Tattooing Practices Initiative within CSC's broader harm reduction program. Subsequently, CSC is conducting the National Inmate Infectious Diseases and Risk Behaviors Survey in 2007-08. The survey is a joint project between CSC Research and Health Services Branches, and the Hepatitis C Branch of the Public Health Agency of Canada (PHAC), and will thus be directed with the assistance of an advisory committee comprised of those groups. As per CSC's Research Plan, the purpose of the survey is to obtain estimates of:

i) inmate testing and infection status before, at and after admission (using inmate recall)
ii) risk behaviours that could result in sexually transmitted and blood borne infections
iii) those sociological and cognitive factors that could reduce risk, including:
    a. information on the extent to which inmates know the risks of blood borne and sexually transmitted infections (specifically HIV/AIDS and hepatitis C) and their prevention
    b. information on inmate awareness and utilization of health education, health promotion and harm reduction programs offered by CSC Health Services
    c. static (e.g. length of sentence) and dynamic (e.g. social support) criminogenic factors

RECOMMENDATION 2: CSC should integrate the evaluation findings with results of the National Inmate Infectious Diseases and Risk Behaviours Survey, and the recommendations of the Health Care Advisory Committee, to ensure an optimal and cost-effective harm reduction strategy.

RECOMMENDATION 3: If CSC decides to continue the operational component of the Initiative, the following modifications should be considered to ensure enhanced levels of success, efficiency and cost-effectiveness:

- ***Consider providing tattoo services in federal institutions only where the risk of blood borne infectious disease transmission through illicit tattooing is revealed to be high.***
- ***Revise the Peer Education and Counselling (PEC) training requirement for inmate tattooists such that this component is delivered primarily as a self-study module, requiring successful completion of a written exam.***
- ***Raise the cost of a tattoo session for inmates such that prices are commensurate with what an individual would pay in the community as a proportion of their disposable income.***
- ***Ensure all Program Officers are provided with direction to operate the Tattoo Room, such that the room's operating hours meet the needs of inmates.***
- ***Purchase full-size ink bottles such that the Initiative coordinator dispenses a pre-specified amount of ink outside of the tattoo room, keeping the bottles in their possession at all times.***
- ***Increase the capacity of the tattoo room.***
- ***Consider using services from community tattooists to train inmate tattooists in the art of tattooing.***

APPENDICES

Appendix 1: Pre-post Questionnaire

Reception Awareness Program
Knowledge Questionnaire Tattooing Practices

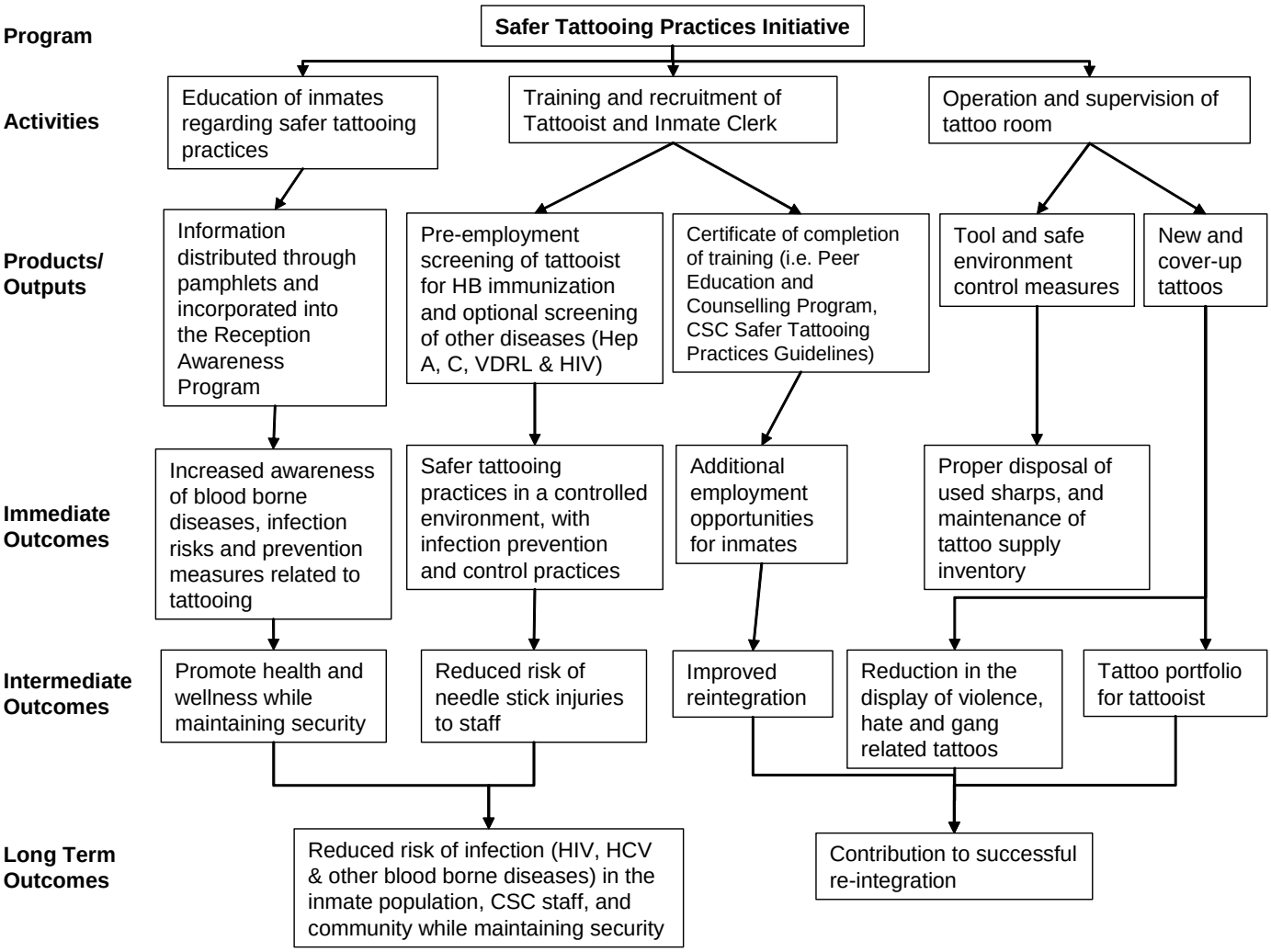
These questions are about your knowledge of some of the ways someone could get an infectious disease. Please indicate by checking the most appropriate box how much risk there is of getting an infectious disease from the list of activities.

		No risk	Low risk	High risk	Don't know
1	How risky is sharing tattoo rigs on the range?	○	○	○	○
2	How risky is sharing tattoo needles when tattooing?	○	○	○	○
3	How risky is sharing inks when tattooing?	○	○	○	○

Please check all that apply:

4	Which of the following diseases can you catch from using unsafe tattoo equipment?	HIV ○	Tuberculosis ○	Hep C ○	Hep A ○
5	Which of the following would you prefer to receive in prison?	A range tattoo ○	A tattoo from a prison tattoo shop ○	Neither ○	Don't know ○
	Why? _____ _____ _____				

Appendix 2: Logic Model



Appendix 3: Staff Interview Key

Safer Tattooing Practices Initiative: Staff Interview

DEMOGRAPHIC INFORMATION

Name (optional) :_____

Date:_____

Institution: _____

Position:

❍ Correctional Officer	❍ Health Care Worker	❍ Social Program Officer
❍ Other (specify)		

Title: _____

SECTION A – GENERAL HEALTH AND TATTOOING INFORMATION

This section will address your experiences with tattooing in general and how it relates to the health of inmates and staff at the institution.

1. Are you aware of any health consequences that occurred to inmates as a result of tattooing?

No	Yes	Unknown	Prefer not to answer	N/A
❍	❍	❍	❍	❍

IF YES, Were the consequences due to a range tattoo, a STPI tattoo, a community tattoo?

	Range Tattoo	Room Tattoo	Community Tattoo
a) infection with HIV			
b) infection with Hepatitis B/C			
c) skin infection			
d) bruising/swelling			
e) other (specify)			

2. In your opinion, what activities are the inmates engaging in at the institution that would put them at high risk for contracting an infectious disease?

❍ injection drug use	❍ unprotected sex	❍ range tattooing
❍ STPI (room) tattooing		
❍ other (specify): _____ Details:_____ _____ _____ _____		

1

3. Please rate the following elements of workplace health and safety, with one (1) representing "no risk" and five (5) representing "high risk".

	No Risk		Some Risk		High Risk	
	1	2	3	4	5	Unknown
a) risk of staff exposure to unclean tattooing devices (illegal rigs) **prior to** the Safer Tattooing Practices Initiative	❍	❍	❍	❍	❍	❍
b) risk of staff needle-stick injuries **prior to** the Safer Tattooing Practices Initiative	❍	❍	❍	❍	❍	❍
c) risk of staff exposure to unclean tattooing devices (illegal rigs) **during** the Safer Tattooing Practices Initiative	❍	❍	❍	❍	❍	❍
d) risk of staff needle-stick injuries **during** the Safer Tattooing Practices Initiative	❍	❍	❍	❍	❍	❍

SECTION B: INITIATIVE ADMINISTRATION/ORGANIZATION

This section will address the administration and organization of the Safer Tattooing Initiative.

1. On a scale from one (1) to five (5), with one (1) representing "not at all " and five (5) representing "very ", how satisfied are you with:.

	Not at all		Somewhat		Very	
	1	2	3	4	5	Unknown
a) supplies provided in the tattoo room	❍	❍	❍	❍	❍	❍
b) flash found in the tattoo room	❍	❍	❍	❍	❍	❍
c) STPI information provided by CSC	❍	❍	❍	❍	❍	❍
d) time provided for tattooing	❍	❍	❍	❍	❍	❍
e) funds provided for the Initiative	❍	❍	❍	❍	❍	❍
f) number of tattooists and apprentices	❍	❍	❍	❍	❍	❍
g) infection prevention and control practices	❍	❍	❍	❍	❍	❍
h) STPI Guidelines being followed	❍	❍	❍	❍	❍	❍
i) educational materials available	❍	❍	❍	❍	❍	❍

2. Please rate the following statements about the Safer Tattooing Initiative according to how much you agree with the statement, with one (1) representing "do not agree at all" and five (5) representing "completely agree".

	Not at all		Somewhat		Completely	
	1	2	3	4	5	Unknown
a) Tattooists/apprentices are satisfied with their work in the Initiative	❍	❍	❍	❍	❍	❍
b) Clients are satisfied with the tattoos they receive in the Initiative	❍	❍	❍	❍	❍	❍
c) The Initiative decreases the number of tattoos that inmates get on the range	❍	❍	❍	❍	❍	❍
d) The clients have to wait too long to get a tattoo through the Initiative	❍	❍	❍	❍	❍	❍
e) The Initiative helps to decrease the likelihood that people will contract HIV and Hepatitis B/C	❍	❍	❍	❍	❍	❍
f) The Initiative makes the institution more safe for offenders	❍	❍	❍	❍	❍	❍
g) The Initiative makes the institution more safe for staff	❍	❍	❍	❍	❍	❍
h) The Initiative has created a demand for tattoos that wasn't there before	❍	❍	❍	❍	❍	❍
i) The number of seizures of tattoo paraphernalia has not changed as a result of the Initiative	❍	❍	❍	❍	❍	❍
j) Inmates are more informed about how infectious diseases are spread.	❍	❍	❍	❍	❍	❍

3. Have supplies ever gone missing from the tattoo room?

No ❍ Yes ❍ Don't Know ❍ N/A ❍

IF YES,

a) Which supplies?

_____
_____
_____

b) How many times?_____

c) Where the supplies found? Where?

_____
_____
_____

d) Was there a report filed regarding the missing supplies?

No ❍ Yes ❍ Don't Know ❍ Prefer not to answer ❍

c) IF NO REPORT WAS FILED, what was the reason?

_____
_____
_____

4. Have you read the Guidelines for the CSC Safer Tattooing Practices Initiative?

No ❍ Yes ❍ Prefer not to answer ❍ N/A ❍

5. Do you feel there is a way that the Initiative could be run at a lower cost without jeopardizing it?

No	Yes	Don't Know	N/A
❍	❍	❍	❍

IF YES, how?_____

_____

_____

_____

SECTION C: OTHER FACTORS

This next section will address factors that might affect how the Initiative runs, such as interference by gangs or criminal organizations. Please remember that the answers to these questions are strictly confidential and that you do not have to answer the questions if you do not wish to do so.

1. Please identify which of the following tattoos inmates have asked to have provided through the Initiative:

❍ gang related tattoos	❍ hate related tattoos	❍ tattoos on hands
❍ tattoos on head/neck	❍ tattoos in genital region	❍ cover-up tattoos
❍ none of the above	❍ other (specify)	

a) What happens when these types of requests are received?

_____

_____

_____

b) In your opinion, are inmates still receiving any of the above tattoos on the range?

No	Yes	Don't Know	Prefer not to answer
❍	❍	❍	❍

c) To your knowledge, are inmates still receiving any range tattoos?

No	Yes	Don't Know	Prefer not to answer
❍	❍	❍	❍

IF YES, Why?

_____

_____

_____

_____

_____

_____

_____

_____

2. To your knowledge, have gangs or other organized crime groups tried to control the activities of the tattoo room?

No	Yes	Don't Know	Prefer not to answer
❍	❍	❍	❍

IF YES,

a) Which ones?

_____
_____
_____

b) How did they attempt to do this?

_____
_____
_____

c) What was done to address the situation?

_____
_____
_____

3. In your opinion, has the introduction of the Safer Tattooing Initiative caused any of the following?

a)	❍ an increase in range tattoos	❍ a decrease in range tattoos	❍ no effect on range tattoos	❍ unknown
b)	❍ an increase in HIV or Hepatitis B/C cases	❍ a decrease in HIV or Hepatitis B/C cases	❍ no effect on HIV or HVC cases	❍ unknown
c)	❍ an increase in the desire for tattoos among inmates	❍ a decrease in the desire for tattoos among inmates	❍ no effect on the desire for tattoos among inmates	❍ unknown
d)	❍ an increase in knowledge of infection prevention and control	❍ a decrease in knowledge of infection prevention and control	❍ no effect on knowledge of infection prevention and control	❍ unknown

4. Have there been any unintended impacts (positive and/or negative) as a result of the Initiative?

_____
_____
_____
_____

5. In your opinion, are staff supportive of the Safer Tattooing Practices Initiative? Explain.

_____
_____
_____
_____
_____

6. Do you have anything to add about your experiences with the Safer Tattooing Practices Initiative?

_____
_____
_____
_____

Thank you for participating.

Appendix 4: Inmate Interview Key

Safer Tattooing Practices Initiative: Inmate Interview

DEMOGRAPHIC INFORMATION

Date:_____ Institution: _____

Have you been incarcerated before (previous to this term)? ___ Yes ___No (IF YES: ___Federal ___Prov.)

Have you received a tattoo from the tattoo room, or are you currently on a waiting list?

❍Received a tattoo from the tattoo room ❍ Is on a waiting list

SECTION A – GENERAL TATTOOING INFORMATION

This section will address your experiences with tattooing in general.

1. Please identify which of the following describes the tattoos you currently have: ***(check all that apply)***

❍ community tattoo (not while incarcerated)	❍ tattoo from Safer Tattooing Initiative IF YES: Cover-Up? (Y/N)
❍ range tattoo from previous incarceration	❍ range tattoo from current incarceration
❍ none	❍ other (specify)

a) If you received a tattoo from the Safer Tattooing Initiative, how many days did you have to wait to get your tattoo after you applied?

Time	Unknown	N/A
_____(Days/Months)__	❍	❍

b) If you have a range tattoo from your current incarceration, did you get it during the period when the Safer Tattooing Initiative was underway?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

c) **IF YES,** what were your reasons for getting a range tattoo?

_____
_____
_____

d) If you have a range tattoo, did you pay to have it done?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

e) **IF YES**, how did you pay for your range tattoo?

❍ With money ($_____)	❍ With cigarettes	❍ Don't know
❍ other (specify)	❍ N/A	

2. Have you ever given a range tattoo?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

1

SECTION B: HEALTH-RELATED INFORMATION

This section will address information as it pertains to your health status. Please be reminded that you do not have to answer any of the following questions if you do not wish to do so.

1. Have you experienced any health consequences as a result of tattooing?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

IF YES, were the consequences due to a range tattoo, a room tattoo, a community tattoo (where applicable)?

	Range Tattoo	Room Tattoo	Community Tattoo
a) infection with HIV			
b) infection with Hepatitis (B/C)			
c) skin infection			
d) bruising/swelling			
e) other (specify)			

2. Have you been tested for the HIV virus?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

IF YES:

a) Did the results show that you were infected with HIV?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

b) When did you contract HIV? *(Interviewer to provide options below)*

❍ while in the community	❍ during a previous incarceration	❍ during this incarceration

c) How did you contract HIV?

❍ injection drug use	❍ unprotected sex	❍ range tattooing
❍ STPI tattooing	❍ blood transfusion	❍ other (specify)

3. Have you been tested for the Hepatitis virus?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

IF YES,

a) Did the results show that you were infected with Hepatitis B/C?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

b) When did you contract Hepatitis? *(Interviewer to provide options below)*

❍ while in the community	❍ during a previous incarceration	❍ during this incarceration

c) How did you contract Hepatitis?

❍ intravenous drug use	❍ unprotected sex	❍ range tattooing
❍ STPI tattooing	❍ blood transfusion	❍ other (specify)

4. Have you ever used drugs on a regular basis? (i.e. was it part of your lifestyle)?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

5. Have you ever injected drugs?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

IF YES,

a) Were you in prison at the time?

No	Yes	Prefer not to answer	N/A
❍	❍	❍	❍

SECTION C: INITIATIVE ADMINISTRATION/ORGANIZATION

This section will address the administration and organization of the Safer Tattooing Initiative.

1. On a scale from one (1) to five (5), with one (1) representing "not at all " and five (5) representing "very ", how satisfied are you with:

	Not at all		Somewhat		Very	
	1	2	3	4	5	Unknown
a) cost of a tattoo room session	❍	❍	❍	❍	❍	❍
b) flash found in the tattoo room	❍	❍	❍	❍	❍	❍
c) time provided for tattooing	❍	❍	❍	❍	❍	❍
d) availability of STPI tattooists and apprentices	❍	❍	❍	❍	❍	❍
e) STPI infection prevention and control practices	❍	❍	❍	❍	❍	❍
e) educational materials available	❍	❍	❍	❍	❍	❍

2. Please rate the following statements about the Safer Tattooing Initiative according to how much you agree with the statement, with one (1) representing "do not agree at all" and five (5) representing "completely agree".

	Not at all 1	2	Somewhat 3	4	Completely 5	Unk.	N/A
a) The inmates are willing to use the Safer Tattooing Initiative in the institution	❍	❍	❍	❍	❍	❍	❍
b) I am satisfied with the tattoo I received through the Initiative	❍	❍	❍	❍	❍	❍	❍
c) The Initiative decreases the chances that someone will get a tattoo on the range	❍	❍	❍	❍	❍	❍	❍
d) The tattooists receive enough training to do the job they do	❍	❍	❍	❍	❍	❍	❍
e) The waiting time to get a tattoo through the Initiative is too long	❍	❍	❍	❍	❍	❍	❍
f) The Initiative helps to decrease the likelihood that people will contract HIV and Hepatitis B/C	❍	❍	❍	❍	❍	❍	❍
g) The Initiative makes the institution more safe for offenders	❍	❍	❍	❍	❍	❍	❍
h) The Initiative makes the institution more safe for staff	❍	❍	❍	❍	❍	❍	❍
i) The Initiative has created a demand for tattoos that wasn't there before	❍	❍	❍	❍	❍	❍	❍
j) I prefer to use the tattoo room rather than get a tattoo on the range	❍	❍	❍	❍	❍	❍	❍
k) I feel more informed about how infectious diseases are spread.	❍	❍	❍	❍	❍	❍	❍

3. Where did you hear about the safer tattooing initiative?

❍ at intake	❍ upon transfer to this institution	❍ staff member
❍ information pamphlet	❍ inmate	❍ other (specify)

SECTION D: OTHER FACTORS

This next section will address factors that might affect how the program runs, such as interference by gangs or criminal organizations. Please remember that answering is voluntary, and answers to these questions are strictly confidential.

1. Please identify which, if any, of the following tattoos you asked the tattoo program to provide:

❍ gang related tattoos	❍ hate related tattoos	❍ tattoos on hands
❍ tattoos on head/neck	❍ tattoos in genital region	❍ prefer not to answer
❍ none of the above	❍ other (specify)	

a) What happened when you made this request?

_____

_____

_____

2. In your opinion, are inmates still receiving any of the above tattoos on the range?

No	Yes	Don't Know	Prefer not to answer	N/A
❍	❍	❍	❍	❍

3. To your knowledge, have gangs or other organized crime groups tried to control the activities of the tattoo shop?

No	Yes	Don't Know	Prefer not to answer	N/A
❍	❍	❍	❍	❍

IF YES,

a) Which one(s)?

_____
_____

b) How did they attempt to do this?

_____
_____

c) What was done to address the situation?

_____
_____

4. In your opinion, are inmates still receiving range tattoos?

No	Yes	Don't Know	Prefer not to answer	N/A
❍	❍	❍	❍	❍

a) Why/ Why not?

_____
_____
_____

b) How are range tattoos different from program tattoos?

_____
_____
_____

5. In your opinion, has the introduction of the Safer Tattooing Initiative caused any of the following:

a)	❍ an increase in range tattoos	❍ a decrease in range tattoos	❍ no effect on range tattoos
b)	❍ an increase in HIV or Hepatitis B/C cases	❍ a decrease in HIV or Hepatitis B/C cases	❍ no effect on HIV or Hepatitis B/C cases
c)	❍ an increase in the desire for tattoos among inmates	❍ a decrease in the desire for tattoos among inmates	❍ no effect on the desire for tattoos among inmates
d)	❍ Other impacts?(explain)		

6. To your knowledge, are any of the tattoo room tattooists also doing range tattoos?

No	Yes	Don't Know	Prefer not to answer	N/A
❍	❍	❍	❍	❍

7. Do you have any suggestions on how the initiative can be improved?

_____
_____
_____
_____
_____

8. Do you have anything to add about your experiences with the Safer Tattooing Practices Initiative?

_____
_____
_____

Thank you for participating.

Appendix 5: Inmate Tattooist/Apprentice/Clerk Interview Key

Safer Tattooing Practices Initiative: Tattooist, Apprentice Tattooist, And Tattooist Clerk Interview

DEMOGRAPHIC INFORMATION

Date:_____

Institution: _____

Position:

❍ Tattooist	❍ Tattooist Apprentice	❍ Tattooist Clerk

SECTION A – GENERAL TATTOOING INFORMATION

This section will address your experiences with tattooing in general.

1. Please indicate, in years, how long you have been involved in the following areas of the tattooing profession:

	Tattooist	Apprentice	Clerk
a) tattooist/apprentice in the community (pre-incarceration)			
b) range tattooist in previous incarceration			
c) range tattooist in current incarceration			
d) program tattooist/apprentice/clerk in current incarceration			
e) other (specify)			

2. Have you witnessed, in your fellow inmates, any health consequences as a result of tattooing?

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

IF YES, were the consequences due to a range tattoo, a <u>room</u> tattoo, a community tattoo (where applicable)?

	Range Tattoo	Room Tattoo	Community Tattoo
a) infection with HIV			
b) infection with Hepatitis (B/C)			
c) skin infection			
d) bruising/swelling			
e) other (specify)			

1

SECTION B: INITIATIVE ADMINISTRATION/ORGANIZATION

This section will address the administration and organization of the Safer Tattooing Initiative.

1. On a scale from one (1) to five (5), with one (1) representing "not at all " and five (5) representing "very ", how satisfied are you with:

	Not at all		Somewhat		Very	
	1	2	3	4	5	Unknown
a) supplies provided in the tattoo room	❍	❍	❍	❍	❍	❍
b) flash found in the tattoo shop	❍	❍	❍	❍	❍	❍
c) training provided by CSC	❍	❍	❍	❍	❍	❍
d) time provided for tattooing	❍	❍	❍	❍	❍	❍
e) funds provided for the Initiative	❍	❍	❍	❍	❍	❍
f) number of tattooists and apprentices	❍	❍	❍	❍	❍	❍
g) infection prevention and control practices	❍	❍	❍	❍	❍	❍
h) STPI Guidelines being followed	❍	❍	❍	❍	❍	❍

2. Please rate the following statements about the Safer Tattooing Initiative according to how much you agree with the statement, with one (1) representing "do not agree at all" and five (5) representing "completely agree".

	Not at all		Somewhat		Completely	
	1	2	3	4	5	Unknown
a) I am satisfied with my work in the program	❍	❍	❍	❍	❍	❍
b) Clients are satisfied with the tattoos they receive in the Initiative	❍	❍	❍	❍	❍	❍
c) The Initiative decreases the number of tattoos that inmates get on the range	❍	❍	❍	❍	❍	❍
d) I did not receive enough training to do the job I do	❍	❍	❍	❍	❍	❍
e) The clients have to wait too long to get a tattoo through the Initiative	❍	❍	❍	❍	❍	❍
f) The Initiative helps to decrease the likelihood that people will contract HIV and Hepatitis B/C	❍	❍	❍	❍	❍	❍
g) The Initiative makes the institution more safe for offenders	❍	❍	❍	❍	❍	❍
h) The Initiative makes the institution more safe for staff	❍	❍	❍	❍	❍	❍
i) The Initiative has created a demand for tattoos that wasn't there before	❍	❍	❍	❍	❍	❍
j) I would like to continue in this field of work when I leave the institution	❍	❍	❍	❍	❍	❍
k) I feel more informed about how infectious diseases are spread.	❍	❍	❍	❍	❍	❍

3. Please identify if the program has serviced clients from any of the following populations:

❍ general population	❍ administrative segregation	❍ disciplinary segregation
❍ intake unit	❍ gang members	❍ other (specify)

4. Where did you hear about the safer tattooing initiative?

❍ at intake	❍ upon transfer to this institution	❍ staff member
❍ information pamphlet	❍ inmate	❍ other (specify)

5. Have supplies ever gone missing from the tattoo shop?

No	Yes	Don't Know	Prefer not to answer
❍	❍	❍	❍

IF YES,

a) Which supplies?

_____
_____
_____

b) What was done to address this?

_____
_____
_____

SECTION C: OTHER FACTORS

This next section will address factors that might affect how the program runs, such as interference by gangs or criminal organizations. Please remember that answering is voluntary, and answers to these questions are strictly confidential.

1. Please identify which of the following tattoos inmates have asked you to provide:

❍ gang related tattoos	❍ hate related tattoos	❍ tattoos on hands
❍ tattoos on head/neck	❍ tattoos in genital region	❍ cover-up tattoos
❍ none of the above	❍ other (specify)	❍ prefer not to answer

a) What has happened when you received these requests?

_____
_____
_____

b) In your opinion, are inmates still receiving any of the above tattoos on the range?

_____
_____
_____

2. To your knowledge, have gangs or other organized crime groups tried to control the activities of the tattoo room?

No	Yes	Don't Know	Prefer not to answer
❍	❍	❍	❍

IF YES,

a) Which one(s)?

_____
_____

b) How did they attempt to do this?

_____
_____

c) What was done to address the situation?

_____
_____

3. In your opinion, are inmates still receiving range tattoos?

No	Yes	Don't Know	Prefer not to answer
❍	❍	❍	❍

a) Why/Why not?

_____
_____
_____

b) How are range tattoos different from program tattoos?

_____
_____
_____

4. In your opinion, has the introduction of the Safer Tattooing Initiative caused any of the following?

a)	❍ an increase in range tattoos	❍ a decrease in range tattoos	❍ no effect on range tattoos
b)	❍ an increase in HIV or Hepatitis B/C cases	❍ a decrease in HIV or Hepatitis B/C cases	❍ no effect on HIV or Hepatitis B/C cases
c)	❍ an increase in the desire for tattoos among inmates	❍ a decrease in the desire for tattoos among inmates	❍ no effect on the desire for tattoos among inmates
d)	❍ Other impacts? (explain)		

5. Do you have any suggestions on how the initiative can be improved?

_____
_____
_____
_____
_____
_____

6. Do you have anything to add about your experiences with the Safer Tattooing Practices Initiative?

_____
_____
_____
_____
_____
_____

Thank you for participating.

Appendix 6: Community Tattooist Interview Key

Safer Tattooing Practices Initiative: Community Tattooist Interview

1. Please indicate, in years, how long you have been involved in the tattooing profession: _____ years.

2. What type of training did you complete in order to become a tattooist?

   _____
   _____
   _____

3. We understand that the cost of a tattoo varies according to the time required and the colours that are used, among other factors. If you had to estimate, on average, how much would it cost for a typical one (1) hour tattoo session in your shop?

   $ _____ / hour

4. If some sort of contractual arrangements (including financial compensation) could be made, would you be willing to do any of the following:

   a) To travel to institutions equipped with tattoo shops to <u>train</u> tattooists/apprentices.

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

   (If any comments, add here)

   _____
   _____

   b) To travel to institutions equipped with tattoo shops to <u>supervise</u> tattooists/apprentices.

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

   (If any comments, add here)

   _____
   _____

   c) To travel to institutions equipped with tattoo shops to <u>perform</u> tattoos on clients.

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

   (If any comments, add here)

   _____
   _____

   d) To travel to institutions equipped with tattoo shops and <u>provide your own ink</u>.

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

   (If any comments, add here)

   _____
   _____

5. Currently, the inmate tattooists have to complete a number of training elements in order to be qualified to perform tattoos through the Initiative. Please indicate if you would be willing to complete the following elements of training:

a) To complete a self-study infectious disease information program?

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

(If any comments, add here)

_____

_____

b) To complete a written test on infectious diseases and infection prevention and control practices?

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

(If any comments, add here)

_____

_____

c) To complete WHMIS training (Workplace hazardous materials)?

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

(If any comments, add here)

_____

_____

d) To have one of your tattooing sessions observed and monitored by an infectious disease nurse to ensure the proper use of infection prevention and control practices?

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

(If any comments, add here)

_____

_____

6. Would you hire a tattooist who had been providing tattoos on the ranges/unit of an institution (illegal tattoos)?

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

a) Why or why not?

_____

_____

7. Would you hire a tattooist who had been providing tattoos through the Safer Tattooing Practices Initiative in an institution?

No	Yes	Unknown	Prefer not to answer
❍	❍	❍	❍

a) Why or why not?

_____

_____

Thank you for your time!

Appendix 7: References: Risk Factors for Having Blood Borne Virus

Abbas, J., Shahnaz, S., Kamyar, M., Shahram, M. & Hossein, S.A. (2006) Risk Factors in Addict Prisoners of Central Provinces of Iran. *The Internet Journal of Epidemiology, 3 (1).* Retrieved from http://www.ispub.com/.

Champion, J. K., Taylor, A., Hutchinson, S., Cameron, S., McMenamin, J., Mitchell, A., et al. (2004). Incidence of Hepatitis C Virus Infection and Associated Risk Factors among Scottish Prison Inmates: A Cohort Study. *American Journal of Epidemiology, 159 (5),* 514-519.

Correctional Service of Canada, Health Services (2003). *Infectious Diseases Prevention and Control in Canadian Federal Penitentiaries 2000-01: A Report of the Correctional Service of Canada's Infectious Diseases Surveillance System*. Retrieved from http://www.csc-scc.gc.ca.

Ontario Ministry of Health (2006). *Assessment Guide for Hepatitis Risk Factors.* Toronto: Queen's Printer for Ontario.

Public Health Agency of Canada (2004). Hepatitis C Virus Transmission in the Prison/Inmate Population. *Canadian Communicable Diseases Report, 30 (16).* Retrieved from http://www.phac-aspc.gc.ca/.

Salcido, R., & Chen, L. (n.d.). *Hepatitis A, B, and C Prevention Programs: Information and Programs for Adults and Adolescents at Risk.* Carson City, NV: Nevada State Health Division and Nevada Department of Corrections.

Tepper, M. (1998). The Epidemiology of Hepatitis C in Canada. *The Hepatitis Information Network*. Pointe Claire, QC.

Thaisri, H., Lerwitworapong, J., Vongsheree, S., Sawanpanyalert, P., Chadbanchachai, C., Rojanawiwat, A., et al. (2003). HIV Infection and Risk Factors among Bangkok Prisoners, Thailand: A Prospective Cohort Study. *BMC Infectious Diseases, 3 (25).*