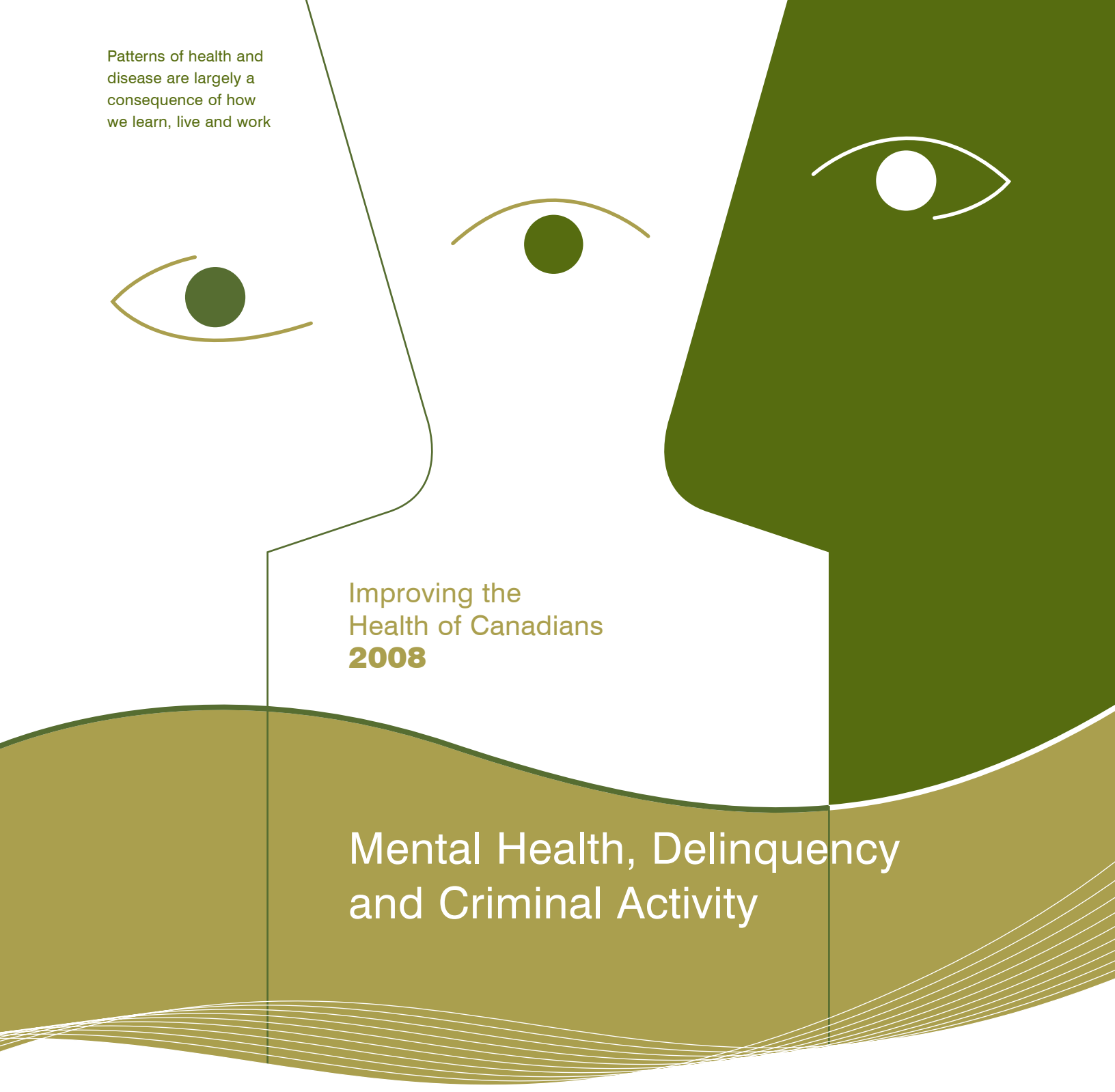
Patterns of health and disease are largely a consequence of how we learn, live and work



Improving the Health of Canadians **2008**

Mental Health, Delinquency and Criminal Activity

Canadian Population Health Initiative

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ISBN 978-1-55465-219-8 (PDF)

How to cite this document:
Canadian Institute for Health Information, *Improving the Health of Canadians: Mental Health, Delinquency and Criminal Activity* (Ottawa: CIHI, 2008).

Cette publication est aussi disponible en français sous le titre *Améliorer la santé des Canadiens : Santé mentale, délinquance et activité criminelle.*
ISBN 978-1-55465-221-1 (PDF)

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About the Canadian Population Health Initiative

The Canadian Population Health Initiative (CPHI), a part of the Canadian Institute for Health Information (CIHI), was created in 1999. CPHI's mission is twofold:

- To foster a better understanding of factors that affect the health of individuals and communities; and
- To contribute to the development of policies that reduce inequities and improve the health and well-being of Canadians.

As a key actor in population health, CPHI:

- Provides analysis of Canadian and international population health evidence to inform policies that improve the health of Canadians;
- Commissions research and builds research partnerships to enhance understanding of research findings and to promote analysis of strategies that improve population health;
- Synthesizes evidence about policy experiences, analyzes evidence on the effectiveness of policy initiatives and develops policy options;
- Works to improve public knowledge and understanding of the determinants that affect individual and community health and well-being; and
- Works within CIHI to contribute to improvements in Canada's health system and the health of Canadians.

About the Canadian Institute for Health Information

CIHI collects and analyzes information on health and health care in Canada and makes it publicly available. Canada's federal, provincial and territorial governments created CIHI as a not-for-profit, independent organization dedicated to forging a common approach to Canadian health information. CIHI's goal: to provide timely, accurate and comparable information. CIHI's data and reports inform health policies, support the effective delivery of health services and raise awareness among Canadians of the factors that contribute to good health.

CPHI Council (as of October 2007)

A council of respected researchers and decision-makers from across Canada guides CPHI in its work:

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- **David Allison**, Medical Officer of Health, Eastern Regional Integrated Health Authority, Newfoundland and Labrador;
- **Monique Bégin**, Professor Emeritus, Faculty of Health Sciences and Visiting Professor, Health Administration, University of Ottawa, Ontario;
- **André Corriveau**, Chief Medical Officer of Health and Director, Population Health, Health and Social Services, Government of Northwest Territories, Northwest Territories;
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- **Ian Potter**, Assistant Deputy Minister, First Nations and Inuit Health Branch, Health Canada, Ontario;
- **Deborah Schwartz**, Executive Director, Aboriginal Health Branch, British Columbia Ministry of Health, British Columbia;
- **Gregory Taylor** (ex officio), Director General, Office of Public Health Practice, Public Health Agency of Canada, Ontario;
- **Elinor Wilson**, President, Assisted Human Reproduction, Health Canada, Ontario; and
- **Michael Wolfson** (ex officio), Assistant Chief Statistician, Analysis and Development, Statistics Canada, Ontario.

Acknowledgements

The Canadian Population Health Initiative (CPHI), a part of the Canadian Institute for Health Information (CIHI), acknowledges with appreciation the contributions of many individuals and organizations to the development of *Mental Health, Delinquency and Criminal Activity*. We would like to express our appreciation to the members of the Expert Advisory Group, who provided invaluable advice throughout the development of the report. Members of the Expert Advisory Group were:

- **Gregory Taylor** (Chair), Director General, Office of Public Health Practice, Public Health Agency of Canada, Ontario;
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- **Dora Nicinski**, President and CEO, Atlantic Health Sciences Corporation (Region 2), New Brunswick;
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- **Margaret Shim**, Project Manager, Population Health Strategies, Alberta Health and Wellness and Adjunct Associate Professor, Faculty of Rehabilitation Medicine, Department of Occupational Therapy, University of Alberta, Alberta;
- **Phil Upshall**, National Executive Director, The Mood Disorders Society of Canada, Ontario and Advisor Stakeholder Relations, Mental Health Commission of Canada; and
- **Cornelia Wieman**, Co-Director, Indigenous Health Research Development Program, and Assistant Professor, Department of Public Health Sciences, Faculty of Medicine, University of Toronto, Ontario.

We would also like to express our appreciation to the following individuals who peer reviewed the report and provided feedback that was invaluable to its development:

- **Justice Edward Ormston**, Advisory Committee Chair—Mental Health and the Law, Mental Health Commission of Canada;
- **John Reid,** Coordinator, Use of Force and Section 19, Office of the Correctional Investigator, Government of Canada; and
- **Rebecca Kong**, Project Manager, Correctional Services Program, Canadian Centre for Justice Statistics, Statistics Canada.

Please note that the analyses and conclusions in this report do not necessarily reflect those of the individual members of the Expert Advisory Group or peer reviewers, or their affiliated organizations.

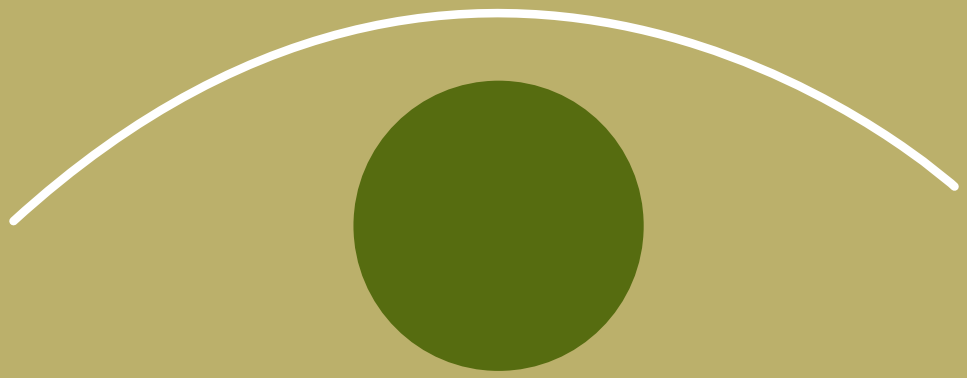
CPHI would like to express its appreciation to the CIHI Board and CPHI Council for their support and guidance in the strategic direction of this report.

CPHI staff members who comprised the project team for this report included:

- **Elizabeth Votta**, Project Manager and Writer
- **Keith Denny**, Literature Search Coordinator
- **Lisa Corscadden**, Senior Analyst
- **Andrew Taylor**, Senior Analyst
- **Andrea Wills**, Analyst and Quality Assurance
- **Judy Threinen**, Quality Assurance
- **Yann Vinette**, Quality Assurance
- **Jean Harvey**, Editor
- **Elizabeth Gyorfi-Dyke**, Editor
- **Jennifer Zelmer**, Editor

CPHI would also like to express its appreciation to the staff in Rehabilitation and Mental Health, CIHI, for their contribution to some of the data analyses presented in this report.

We appreciate the ongoing efforts of researchers working in the field of population health to further our knowledge and understanding of the important issues surrounding health determinants and related health improvements.



Introduction

Mental health is more than just the absence of a mental illness diagnosis.[1] The World Health Organization (WHO) defines mental health as "a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."[2](p. 1) The Public Health Agency of Canada (PHAC) has also adopted a broad definition: "mental health is the capacity of each and all of us to feel, think and act in ways that enhance our ability to enjoy life and deal with the challenges we face. It is a positive sense of emotional and spiritual well-being that respects the importance of culture, equity, social justice, interconnections, and personal dignity."[3](p. 2)

Mental health can be influenced by a number of factors or determinants of health, including individual, physical, social, cultural and socio-economic characteristics.[3] These and other factors can influence mental health in complex ways that are not always well understood. By focusing on specific groups within the population we can further explore these links. Such groups include youth and adults at risk of committing delinquent or criminal acts and those with a mental illness who are involved with Canada's criminal justice system. *Improving the Health of Canadians: Mental Health, Delinquency and Criminal Activity* is the second of three reports on mental health that CPHI will release over an 18-month period. The first report in the series, *Improving the Health of Canadians: Mental Health and Homelessness*, was released in August 2007.[4]

Purpose and Organization of Report

Why look at delinquency and criminal activity in the context of mental health? We know there are many differences in the types of delinquent and criminal acts people are committing, who is committing them and where they are committing them.[7] We also know that while most people with a mental illness do not commit crimes, youth and adults with diagnosed mental illnesses are over-represented in Canada's correctional facilities.[3, 8, 9] What we know less about is whether there is a link between mental health—particularly factors such as personal coping skills, perceived self-worth and social networks—and delinquency and criminal activity. We also know less about the prevalence of specific mental illnesses among those involved with the criminal justice system and what works in terms of diversion and rehabilitation strategies.

In an effort to look at these various issues, this report examines the relationships between mental health, delinquency and criminal activity and their various determinants. By better understanding how these issues are related to each other, we can better understand what interventions and policies may be effective at promoting mental health, preventing delinquency and criminal activity and reducing the risk of repeat offending, particularly among those with a mental illness.

Section one looks at what mental health–related factors at the individual, family, school/peer and community levels are risk factors for or protective factors against delinquency or criminal activity. Given the focus on delinquency, part one has a heavy focus on youth. This youth focus is also seen in new CPHI analyses of data from Statistics Canada's National Longitudinal Survey of Children and Youth (NLSCY). These analyses explore how various mental health–related factors are linked to delinquency in either a protective manner or as a risk factor. Section one concludes with a look at various policies and programs that address both mental health promotion and the prevention of delinquency or criminal activity.

Section two looks at people with a mental illness who were or are involved with the criminal justice system. It looks at the characteristics of those with a mental illness and a history of criminal behaviour who are admitted to a mental health bed. It also explores the prevalence of mental illness (including addictions) among those who have committed a crime and are currently involved with Canada's justice system. Section two concludes with a look at existing policies and programs that have a mental health focus for those presently in or released from a correctional facility.

Mental Health and Resilience: CPHI's Strategic Theme for 2007 to 2010

The Canadian Population Health Initiative (CPHI) has selected mental health and resilience as one of four themes that will guide its work for 2007 to 2010. In doing so, CPHI hopes to build on other recently released reports on mental health (for example, *The Human Face of Mental Health and Mental Illness in Canada 2006*[3] and *Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada)*,[5] as well as various efforts at the federal level, such as the launch of the Mental Health Commission of Canada.[6] CPHI's work will explore positive aspects of mental health, including self-perceived mental health, coping abilities and self-esteem, as well as the determinants of mental health—what makes people mentally healthy.

As part of its work in this area, CPHI is releasing a series of three *Improving the Health of Canadians* reports on mental health. CPHI's *Improving the Health of Canadians* reports aim to synthesize key research findings on a given theme, present new data analysis on an issue and share evidence on what we know and what we do not know about what works from a policy and program perspective. The underlying goal of each *Improving the Health of Canadians* report is to advance thinking and action on population health in Canada.

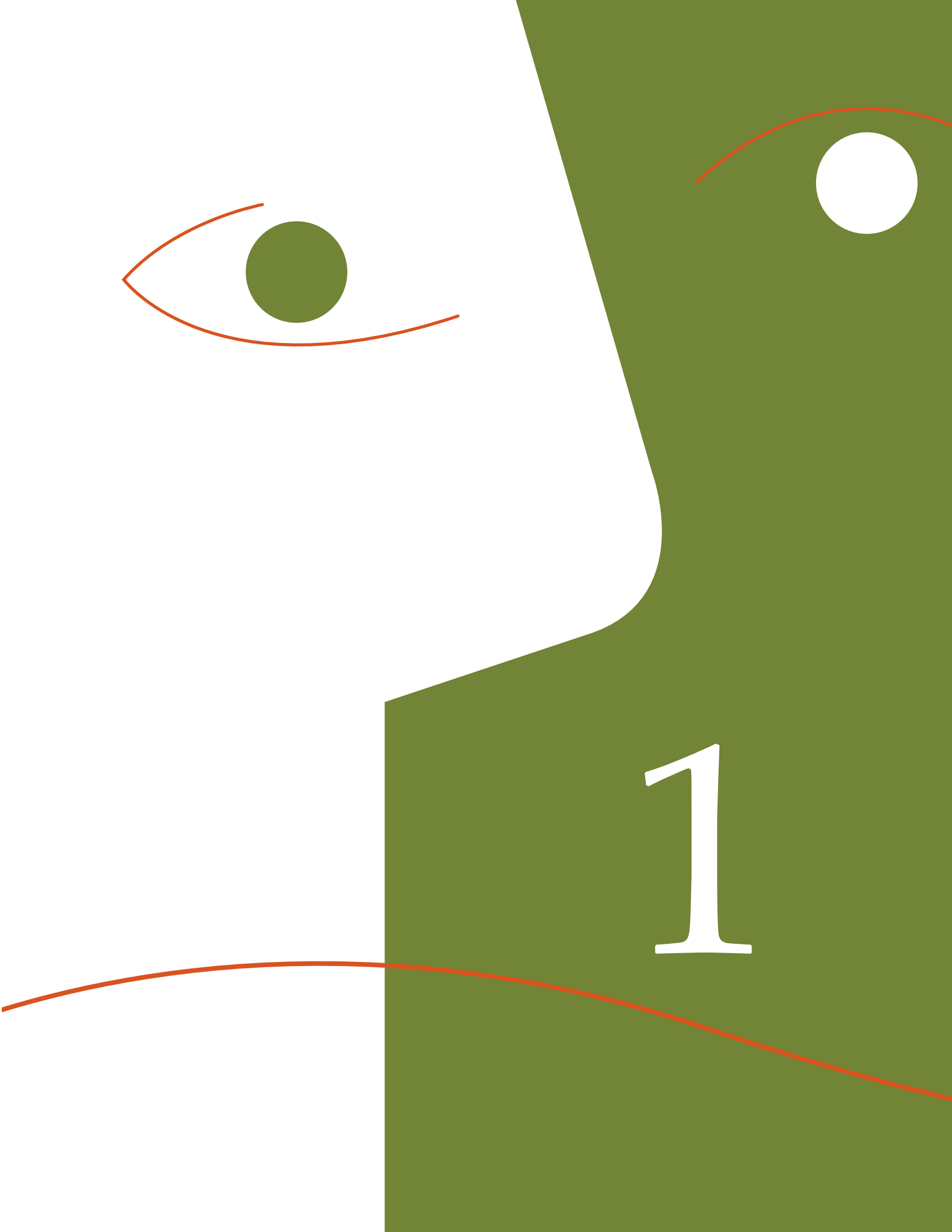
Selection Process for Literature, Policies and Programs Highlighted in Report

A search protocol was developed in order to identify studies in the areas of criminal behaviour, mental health, mental illness and corrections services. The protocol outlined the published journal literature databases to be searched, along with appropriate search terms, as well as web-based grey literature sources and specific items targeted for hand-searching. Where possible, database searches were limited to studies published in English or French. The search strategy limited articles to those that had been peer-reviewed and that were published in the last 10 years.

Search strategies were developed for the following databases: Pubmed, PsycINFO, ERIC, EMBASE, Sociological Abstracts, Social Services Abstracts, Criminal Justice Abstracts, the Cochrane Collaboration, PAIS International, CIRRIE, Child Development and Adolescent Studies and the Campbell Collaboration. Google Scholar was the primary web-based resource searched for books, systematic reviews and grey literature. The following websites were searched: Statistics Canada, Canadian Centre for Justice Statistics and Correctional Service of Canada. The bibliographies of the following reports were also hand-searched: *The Human Face of Mental Health and Mental Illness in Canada 2006; Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada*; and an unpublished environmental scan of the mental health field commissioned by CPHI.

These searches returned approximately 10,700 articles, which were screened for relevance by title. This reduced the pool to approximately 1,835 articles, the abstracts of which underwent a second relevance review. This left 480 articles, which were reviewed in their entirety. Articles underwent an initial screening on the basis of study type, research focus, year of publication and location of study, followed by a critical appraisal on the basis of research hypothesis, sample descriptors, measures, outcomes and study strengths and limitations. Where possible, Canadian literature was referenced; international literature was referenced as appropriate or in the absence of Canadian literature.

Policies and programs were selected using the same literature criteria. A search protocol for government and non-government websites was developed to identify programs, policies and initiatives in the areas of mental health, mental illness, mental health services, criminal behaviour and the justice system. Examples were selected on the basis of relevance, availability of detailed information and evaluated outcomes. The policy- and program-specific information presented in this report is meant neither to be an exhaustive list nor to imply that, by omission, other information does not exist.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Mental Health, Delinquency, Criminal Activity and the Determinants Of Health

A number of factors, including coping skills and perceived self-worth, as well as characteristics specific to one's social and physical environments, culture and socio-economic status, can influence mental health.[3] Many of these factors, including others such as mental illness, aggressive tendencies, family conflict, negative parenting practices and peer influences, school-related difficulties and social isolation can also play a role in delinquency and criminal acts.[10] Many researchers have explored what factors may increase one's risk for committing delinquent and criminal activities. Similarly, many have explored what factors may protect people from committing delinquent or criminal acts. In most cases, studies have looked at mental health as a determinant of crime, and not as an outcome. Further, given the focus on early identification of risk and protective factors, many studies have focused on children and youth, using delinquent behaviour such as aggression or property damage as outcome measures.

Research shows that developmental outcomes and health in adulthood are influenced by biological and developmental factors, experiences in early childhood and exposure to various risk factors.[11] Negative childhood experiences are associated with children's interactions with other children, parents, other adults and school.[10, 12] For some, these experiences can be manifested through poor health, learning difficulties, victimization, running away, school difficulties, depression, difficult or aggressive behaviour and delinquency.[10]

New CPHI analyses of data from Statistics Canada's National Longitudinal Survey of Children and Youth (NLSCY) show that in 2004–2005, 44% of responding youth reported sometimes or often engaging in aggressive behaviour and 51% reported they sometimes or often engaged in property delinquency (see Table 1 for definitions).[i] Analyses also tend to show a clustering effect. Fifty-eight percent of youth who reported often engaging in aggressive behaviour also reported often engaging in property delinquency; conversely, 74% of youth who reported never engaging in aggressive behaviour also reported never engaging in property delinquency. A recent report by the Canadian Centre for Justice Statistics reported similar findings. Following a group of youth from age 8 to 18, police-reported data showed that offending youth did not tend to specialize in the types of crimes they committed; two-thirds (65%) committed more than one type of property, violent or other offence; 10% of youth committed a large proportion (46%) of the total offences.[13]

This section explores some of the links between mental health, delinquency and criminal activity more closely. It looks at these relationships within four contexts: individual, family, school/peer and community. These are contexts which other reports have used to identify risk factors for delinquent and criminal activity.[10] Many of the risk factors within these four contexts are associated with the determinants of mental health, and some are related to mental health more specifically. While some studies are longitudinal in nature, others are based on correlational data, thereby limiting the conclusions that can be made about causality.

Table 1

Self-Reported Delinquent Behaviour Among Youth Aged 12 to 15, 2004–2005

Aggressive Behaviour	A score based on responses to the following six items: I get into many fights, I react to accidents with anger, I physically attack people, I threaten people, I bully or am mean and I hit others my age.	**Often** 10% **Some** 34%* **None** 56%*
Property Delinquency	A score based on responses to the following six items: I destroy my own things, I steal at home, I destroy other people's things, I tell lies or cheat, I vandalize and I steal outside my home.	**Often** 7% **Some** 44%* **None** 50%*

Notes:
Often: Youth who answered sometimes to four or more questions or often to at least two questions.
Some: Youth who answered sometimes to at least one question and were not already coded as often.
None: Youth who answered never to all questions.
* Significantly different from "often" at $p<0.05$.
Due to rounding, numbers do not add up to 100%.

Source:
CPHI analysis of National Longitudinal Survey of Children and Youth (Cycle 6, 2004–2005), Statistics Canada.

i Analyses involving the 2004–2005 NLSCY data were based on the responses of 3,768 youth to the aggressive behaviour and property delinquency questions (86% and 85% response rate for aggressive behaviour and property delinquency, respectively). Results cannot be generalized to the Canadian population of youth, as the sample originally selected in 1994 has not been augmented to account for immigration, among other population changes. The survey excludes children living on Indian reserves or Crown lands, residents of institutions, children of full-time members of the Canadian Armed Forces and residents of some remote regions.

Mental Health, Delinquency and Criminal Activity: Relationships at the Individual Level

Many reports have focused on various individual-level factors such as age, gender, and ethnicity as determinants of risk for delinquency and criminal activity. Some studies show increased delinquency with age among youth[14, 15] while others do not.[16]

Overall, studies show higher rates of delinquency among males than females.[14–16] Consistent with this, CPHI analyses of 2004–2005 NSLCY data show that compared to males, females are less likely to report engaging in aggressive behaviour (see Table 2). This pattern holds even when looking at previous publications that used different cycles of NLSCY data and different definitions of aggressive behaviour.[17]

Studies also show differences in the types of delinquency between male and female youth, as well as between Aboriginal and non-Aboriginal youth. Analyses of 1998–1999 NLSCY data showed that males were more likely to engage in violent and sexual offences; females were as likely as males to engage in drug trafficking and almost as likely to engage in property offences.[14] Rates of self-reported delinquency were similar among non-Aboriginal youth and Aboriginal youth (39% and 41%); however, Aboriginal youth reported engaging in more serious offences.[14]

Other individual-level factors that are more specific to mental health, such as hyperactivity,[17] aggressive tendencies, lack of motivation[14] and victimization[14, 18] have also been linked to delinquency. For example:

- Analyses of NLSCY data showed that youth aged 12 and 13 who reported hyperactivity and depression were more likely to report high levels of aggressive behaviour, as well as high levels of delinquent acts involving property.[17]

Table 2

Self-Reported Aggressive Behaviour Among Male and Female Youth Aged 12 to 15, 2004–2005

		Males	Females
Aggressive Behaviour	Often	13%*	7%
	Some	37%*	31%
	None	50%*	62%

Note:
* Significantly different from "females" at $p<0.05$.

Source:
CPHI analysis of National Longitudinal Survey of Children and Youth (Cycle 6, 2004–2005), Statistics Canada.

- A Toronto study found that compared to 36% of youth who had not engaged in delinquent behaviour, 56% of delinquent youth reported incidents of being the victim of bullying, assault, threats and theft.[18]

Consistent with these findings, CPHI analyses of NLSCY data found an association between self-reported aggressive behaviour and a number of individual-level mental health–related variables—or risk factors—including hyperactivity (inability to sit still, trouble concentrating, impulsiveness); indirect aggression (bullying others, difficulties enjoying oneself, talking about others behind their backs when mad); and anxiety (being unhappy, worrying, crying, being nervous or having trouble being happy). Figure 1 shows that 56% of all youth reported not being aggressive. However, youth who reported being hyperactive (25%), indirectly aggressive (23%) and anxious (27%) were significantly less likely to report not being aggressive.[ii] Internationally, many studies have looked at long-term patterns of criminal behaviour.

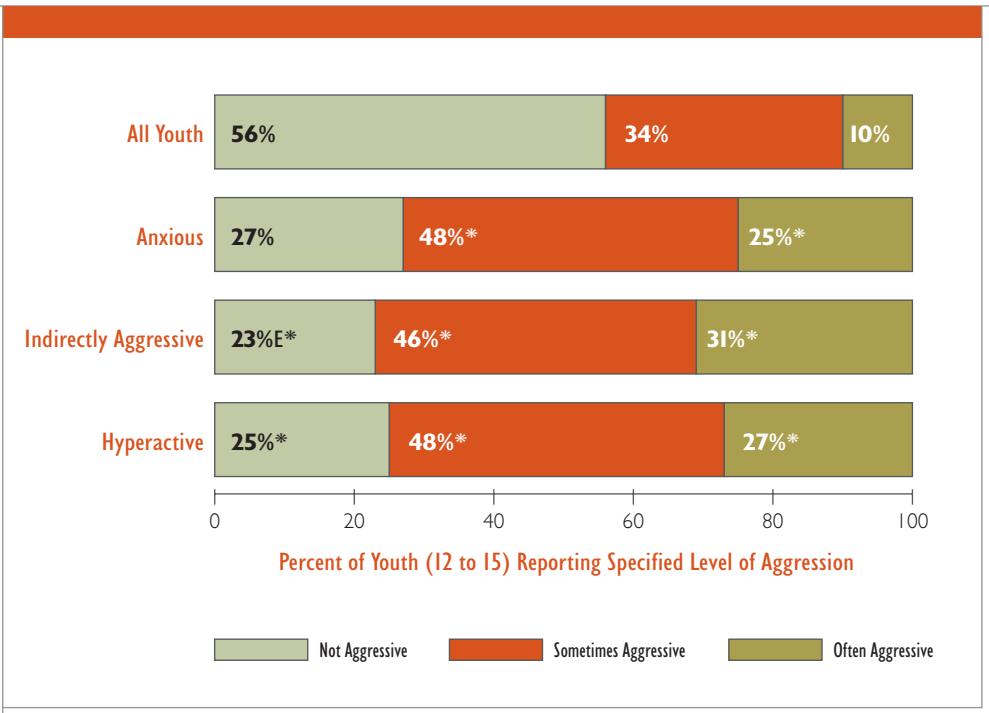
Overall, studies show continuity between aggressive behaviour in childhood, violence in adolescence and adulthood and a link to such mental health-related factors as early conduct problems and self-esteem. For example:

- A San Francisco longitudinal study of 305 participants (230 males and 75 females) found that hyperactivity-impulsivity and early conduct problems were associated with a greater likelihood of having an arrest record for males, but not females as adults.[19]
- A New Zealand study that followed a cohort from age 3 to 26 found that compared to adolescents with high self-esteem, those with low self-esteem grew up to have more mental health problems (major depression disorder and anxiety disorders), more physical health problems (poor cardiorespiratory health, high waist-to-hip ratio, poor self-rated health), more criminal convictions and fewer economic prospects (left school early, less likely to attend university). All of these findings held when controlling for sex and socio-economic status.[20]

ii Given the cross-sectional nature of all CPHI analyses of the NLSCY data, conclusions regarding causality cannot be drawn.

Figure 1

Levels of Aggressive Behaviour by Individual-Level Risk Factors for Youth Aged 12 to 15, 2004–2005



Notes:
E: Coefficient of variation between 16.6% and 33.3%. Interpret with caution.
*Significantly different than same level of aggression for "all youth" at p<0.05.

Source:
CPHI analysis of National Longitudinal Survey of Children and Youth (Cycle 6, 2004–2005), Statistics Canada.

The research presented to this point shows a link between various mental health–related factors as risk factors for delinquency/aggression—particularly among youth. Some studies, however, have also looked at positive mental health as a protective factor against delinquency, highlighting such factors as sense of belonging, social support, self-efficacy, trustworthiness and life satisfaction.

- Analyses of data from 2,245 female youth in the U.S. National Longitudinal Study of Adolescent Health indicated that religious beliefs, abstaining from alcohol use, feeling loved and wanted, feeling teachers were fair and parental reporting of youth as trustworthy were associated with reduced risk of delinquency.[21]
- A U.S. study involving almost 800 female youth found an association between lower rates of delinquency with higher rates of optimism about the future and a greater likelihood of using one's social support networks.[16]
- A study of 2,146 youth from rural communities in a south-eastern U.S. state found that stronger pro-social values, greater self-efficacy and a feeling of trustworthiness were associated with lower levels of delinquency, risky sex and drug use.[15]

- In South Carolina, analyses of data from over 5,000 youth showed that students who reported being more satisfied with life were significantly less likely to have carried a weapon on school property or in general. Those who were more satisfied with life also reported being in fewer physical fights in the previous year.[22]

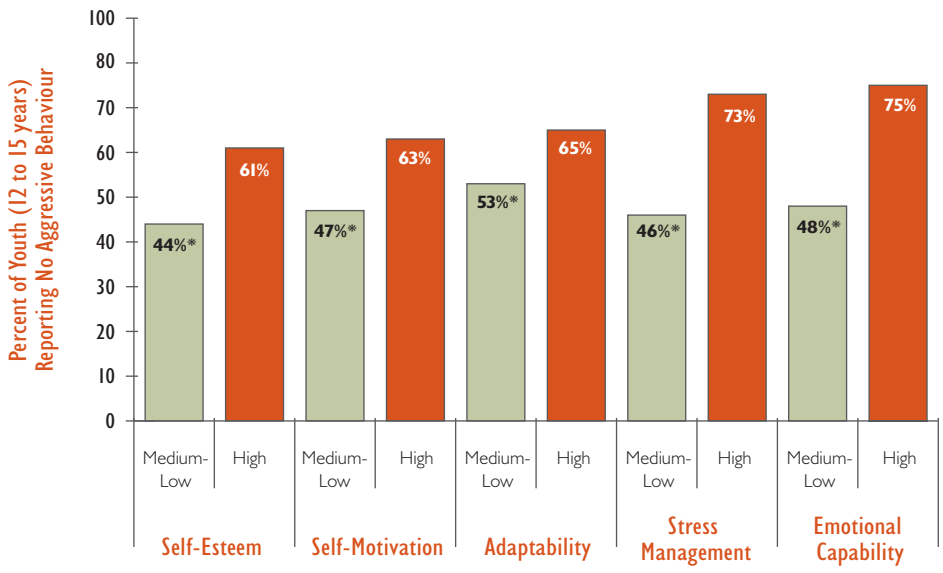
Consistent with these findings, analyses of NLSCY data conducted by CPHI show an association between various individual-level mental health factors as protective against aggressive behaviour (see Figure 2). Analyses looked at the following factors:

- Self-esteem: like and feel proud of self, and what they do;
- Self-motivation: have optimism, hope and general happiness or enjoyment;
- Adaptability: understanding hard questions, coming up with many and varied solutions to hard questions;
- Stress management: higher level of emotional regulation, not easily angered or upset; and
- Emotional capability: combines self- and social-awareness questions with adaptability, motivation and stress management.

Analyses showed that youth with high levels of these protective factors were significantly more likely to report never engaging in aggressive behaviour than those with medium-low levels. For example, 75% of youth with high emotional capability scores reported no aggressive behaviour, compared to 48% of youth who reported medium-low levels.

Figure 2

Individual-Level Protective Factors for Youth Aged 12 to 15 Reporting No Aggressive Behaviour, 2004–2005



Note:
*Significant difference between levels within each mental health factor at $p<0.05$.

Source:
CPHI analysis of National Longitudinal Survey of Children and Youth (Cycle 6, 2004–2005), Statistics Canada.

Mental Health, Delinquency and Criminal Activity: Relationships at the Family Level

Experts suggest that low socio-economic status, low parental supervision, isolation or low family interaction,[23] harsh or inconsistent parenting styles, family violence or parental conflict and abuse or neglect[10] are among various family-related factors that may increase the risk of youth delinquency. Canadian studies show an association between high levels of aggressive behaviour among children/youth with punitive parenting practices,[17, 24] lower parental nurturance and higher parental rejection.[17] Punitive parenting and lack of parental nurturance have been associated with increased delinquency involving property;[17] lack of parental supervision has been associated with general delinquency.[25] Compared to parents with lower punitive parenting scores, those with higher punitive parenting scores were more likely to rate their children as aggressive, regardless of their income status and their child's sex.[24]

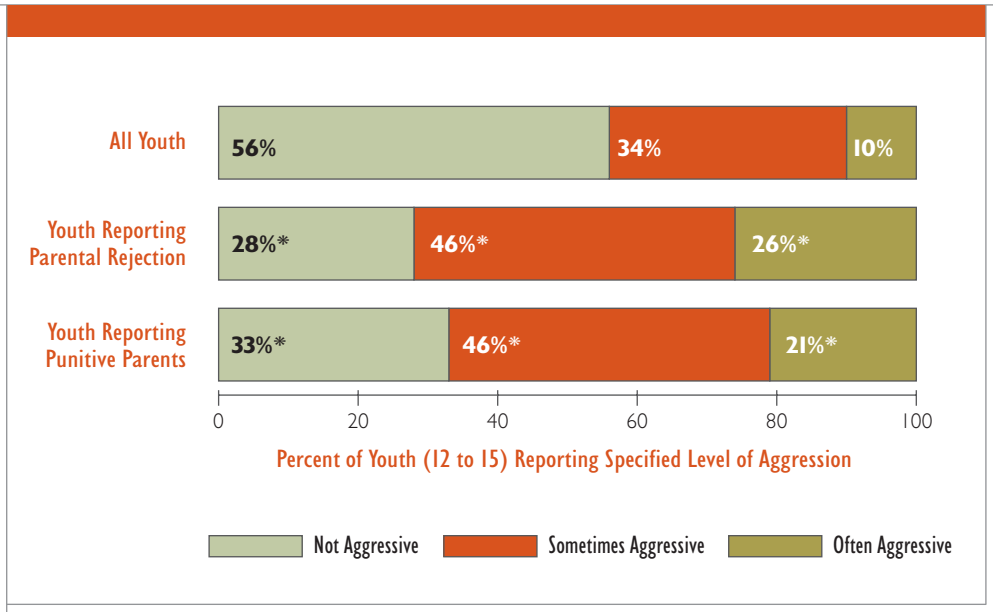
Consistent with these findings, CPHI found that youth who reported high levels of parental rejection and punitive parenting were more likely to engage in aggressive behaviour than all youth (see Figure 3). For example, compared to 10% of all youth who reported often being aggressive, 21% of youth who said their parents often yelled or threatened to hit them reported often being aggressive.

Parental rejection: Inconsistent application of rules and punishment by parents.

Punitive parenting: Parents who often yelled, threatened to hit them or did not solve problems with them.

Figure 3

Levels of Aggressive Behaviour by Negative Parenting Practice for Youth Aged 12 to 15, 2004–2005



Note:
*Significantly different than same level of aggression for "all youth" at $p<0.05$.

Source:
CPHI analysis of National Longitudinal Survey of Children and Youth (Cycle 6, 2004–2005), Statistics Canada.

Various family-related factors have also been associated with increased risk for gang membership among youth. For example, a Seattle study involving 808 youth found that the following factors were risk factors for gang membership: living with one parent, with one parent and other adults or with no parents; having parents with favourable attitudes toward violence; sibling anti-social behaviour; and poor family management practices.[26]

Research also shows an association between youth delinquency, parental mental health problems and other family-related stressors. A Toronto study found significantly higher rates of physical abuse, parental separation/divorce, parental alcohol use, violence between parents and parental mental health problems among incarcerated youth compared to non-incarcerated youth.[27] A 2004 survey in B.C. found that 62% of youth in custody had a parent who struggled with an addiction or a mental illness and/or had a criminal record.[28]

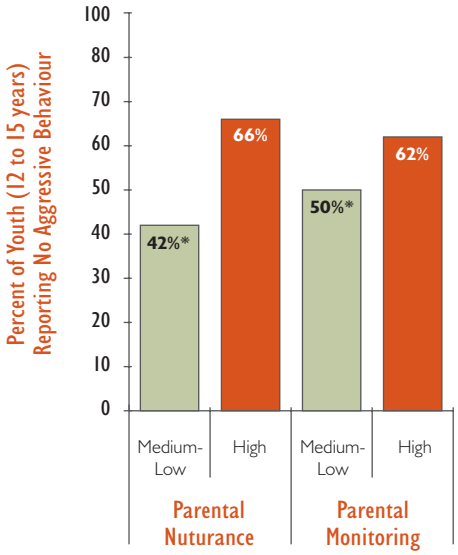
Research also shows that positive parenting styles and family-related factors can be protective against substance abuse,[30] delinquency[14, 31] and violent behaviour.[32] Analyses conducted by CPHI for this and for previous publications report similar findings. For example, youth aged 12 to 15 with higher levels of parental nurturance tended to have fewer contacts with peers who engaged in criminal behaviour.[33] Analyses of 2004–2005 NLSCY data show that the proportion of youth who said they never engaged in aggressive behaviour was significantly higher among youth with high levels of parental nurturance (66%) and parental monitoring (62%), compared to those who reported medium-low levels of these parenting practices (42% and 50%, respectively) (see Figure 4).

Parental nurturance: Parents who seem proud, say nice things and show their children they are appreciated.

Parental monitoring: Parents know where their children are, what they are doing, who they are with and when to expect them home.

Figure 4

Proportion of Youth Reporting No Aggressive Behaviour by Parenting Practice, Youth Aged 12 to 15, 2004–2005



Note:
*Significant difference between levels at $p<0.05$.

Source:
CPHI analysis of National Longitudinal Survey of Children and Youth (Cycle 6, 2004–2005), Statistics Canada.

Residential Schools and Parenting Practices

A report prepared for the Aboriginal Healing Foundation discussed the experiences of children who attended residential schools and potential intergenerational effects on families of residential school students. The residential school system referred to in this report included industrial schools, boarding schools, homes for students, hostels and billets attended by Aboriginal students.[29] Residential school students tended to be separated from their parents and the familiar surroundings in which they were raised.[29] As adults, many former residential school students reported being ill-prepared to be parents, having problems showing affection to their own children and using punitive or harsh discipline.[29] Information presented in this report shows a link between punitive parenting and aggressive behaviour among children.

Studies in the U.S. report similar findings regarding the protective role of positive family contexts.

- Analyses of data (N = 13,110) from the U.S. National Longitudinal Study of Adolescent Health found that a number of family-related factors were associated with fewer reported violent behaviours among both boys and girls including: being able to discuss problems with parents; perceiving parents as having high expectations about school performance; having a high sense of family connectedness; doing activities together; and having at least one parent home during at least one of four times during the day (in the morning, when arriving home from school, at dinner time or at bedtime).[32]
- A study involving 3,046 youth from California and Wisconsin found that girls reported significantly higher levels of parental monitoring and parental involvement compared to boys. Household organization, which refers to agreed-upon family structures and rules, was associated with less delinquency among boys.[34]

Mental Health, Delinquency and Criminal Activity: Relationships at the School and Peer Level

Within the school context, mental health is often looked at in terms of youth interactions with peers, how engaged they are with school activities, their attendance at school and their academic performance. Research shows that feeling connected to one's school may be a protective factor against violent behaviour,[32, 35] substance use, associations with peers who engage in criminal behaviour[33] and delinquency.[34] For example, one study found that while girls had significantly higher levels of teacher bonding and academic achievement than boys, academic achievement and school orientation were significant protective factors against delinquency for both boys and girls.[34]

CPHI's analyses of 2004–2005 NLSCY data show that youth who reported positive school experiences were more likely to report not being aggressive than youth who reported fewer positive experiences. For example, 65% of youth who reported being highly involved with their school reported no aggression, compared to 47% of those not as involved; 66% of youth who said they liked school reported no aggression compared to 47% of youth who said they did not like school that much.

Not all youth, however, feel connected to their school. School-related risk factors for delinquency include low academic achievement, disruptive behaviour and bullying, lack of commitment to school, truancy, dropping out of school and being isolated or socially excluded at school.[10]

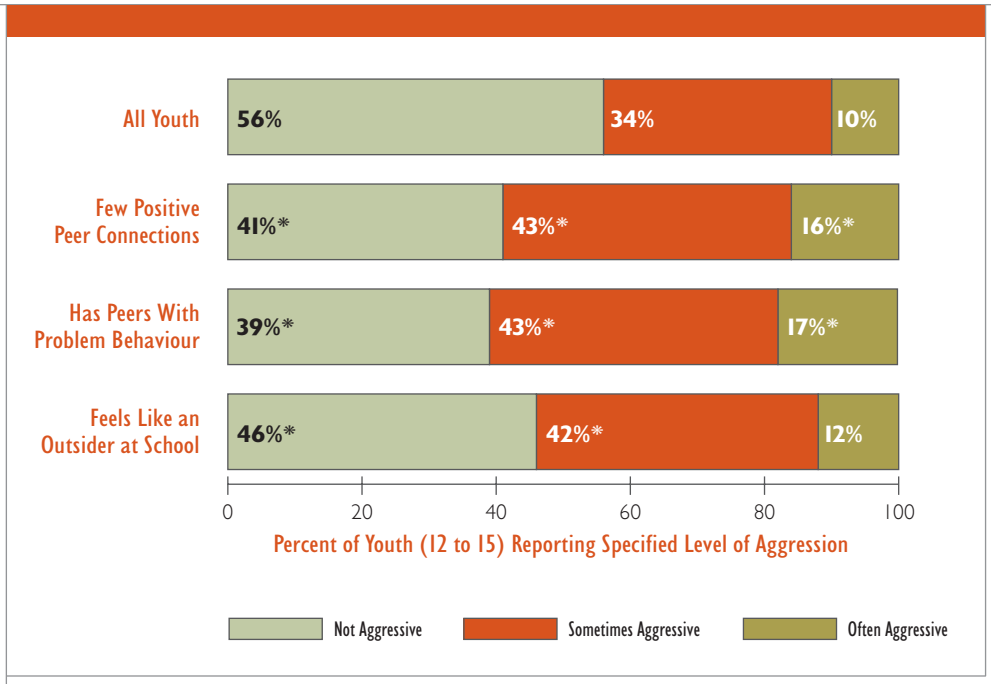
- Analyses of 1998 NLSCY data showed that negative school behaviour such as truancy and suspensions, as well as negative peer influences, were associated with general delinquency among youth aged 12 to 15.[14]
- In Toronto, analyses of data from the International Youth Survey showed that youth who reported having older or delinquent friends, or groups of friends who committed illegal acts or tolerated illegal activity, had higher rates of delinquent behaviour themselves.[18]
- Using 2004–2005 NLSCY data, CPHI found that youth who reported feeling like an outsider at school, having friends with problem behaviour and having few positive peer connections reported higher rates of aggressive behaviour (Figure 5).

Bullying behaviour, including threatening someone weaker and hitting, kicking, grabbing and shoving, has also been linked to delinquency and problem behaviour among youth.[36] Research looking at four categories of males (bullies, victims, both bullies and victims and neither bullies nor victims) found that those who were both bullies and victims reported the most psychological dysfunction and problem behaviour, including drug use, possession of weapons and other delinquent behaviour.[36]

Research suggests that some of these school-related factors, including having a learning disability, poor academic achievement (in elementary school), low commitment to school, low educational aspirations and having friends who engaged in problem behaviour, can also be risk factors for gang membership.[26] A Colorado study of over 3,600 youth found that gang members had fewer school bonds than non-gang members, as did males compared to females.[37] In a Montréal study of 756 youth, delinquency at age 16 was significantly associated with prior delinquency, current gang membership and having delinquent friends.[25]

Figure 5

Levels of Aggressive Behaviour by Peer Risk Factors, Youth Aged 12 to 15, 2004–2005



Note:
* Significantly different than same level of aggression for "all youth" at p<0.05.
Due to rounding, some numbers do not add up to 100%.

Source:
CPHI analysis of National Longitudinal Survey of Children and Youth (Cycle 6, 2004–2005), Statistics Canada.

Mental Health, Delinquency and Criminal Activity: Relationships at the Community Level

Feeling connected, whether to one's family, peers or community, supports the development of mutual trust and increased sense of meaning, control and positive self.[3] Given this, some research looking at the link between mental health and delinquency at the community level has focused on volunteerism and feelings of belonging—some have found linkages between mental health and delinquency, while others have not. For example, previous analyses of NLSCY data conducted by CPHI show that while youth who volunteered were less likely to use tobacco and marijuana and more likely to report high self-worth and excellent or very good self-rated health, there was no association between volunteering and youth contact with peers who engaged in criminal behaviour.[33] In contrast, a Houston, Texas study involving over 1,000 youth found that delinquent youth who felt a positive bond to society were less likely to engage in deviant behaviour even when they felt negative about themselves.[38]

Other research looking at the relationship between mental health and delinquency at the community level has focused on the physical or socio-economic characteristics of one's environment, including poor neighbourhood and housing conditions; high turnover of neighbourhood residents; lack of facilities, services and job opportunities; and access to drugs.[10] For example:

- Living in neighbourhoods with high levels of marijuana availability or in which many young people were in trouble with the law were risk factors for gang membership in a longitudinal study of 808 youth in Seattle.[26]
- A study of 168 fifth-graders in Milwaukee, Wisconsin, found that parent, teacher and child reports of greater child misconduct were associated with living in neighbourhoods with higher rates of violent crime, lower incomes, lower adult education levels and more households headed by females. Parent and child reports of child distress were also higher in these neighbourhoods.[39]
- An Alabama study of 2,468 youth aged 9 to 19 living in high-poverty neighbourhoods found that among both males and females, violent behaviour, substance use, sexual activity and unintentional injuries were higher among those reporting high levels of hopelessness than those reporting low levels.[40]

Mental Health Outcomes Associated With Victimization

Much of the research presented in this report is focused on mental health as a risk factor for or protective factor against criminal behaviour. While few studies have looked at mental health as an outcome among those committing criminal acts, experts suggest that compromised mental health can also be the result of being a victim of a crime.[41] A thorough discussion of this literature base is beyond the scope of this report, but research shows that victims directly affected by crime (including domestic violence and childhood abuse) may experience post-traumatic stress disorder, depression, substance abuse and suicidal behaviour.[41] Fearing crime has also been linked to stress, depression, sleeping problems and social withdrawal.[41] Analyses of data from the 2004 General Social Survey showed that women tended to express more crime-related fear than men. When women had been the victims of a crime, they tended to feel more fearful, shocked, cautious, aware and victimized than males.[42] Compared to respondents who had not experienced or witnessed a crime, those who had were more likely to perceive an increase in their neighbourhood crime levels.[42]

Mental Health and Crime Prevention: Policies and Programs

Research presented to this point shows a number of linkages between mental health–related factors and delinquency within the individual, family, school/peer and community contexts. A scan of the policy landscape shows that various aspects of these contexts have been the focus of policies and strategies at the pan-Canadian, provincial/territorial and local levels. However, few policies and strategies, particularly those for which evaluations have been conducted, address factors specific to mental health and crime prevention simultaneously.

Canadian Context: Mental Health Initiatives and Crime-Prevention Strategies

Crime prevention has been embedded in a number of Canadian initiatives, some of which have a primary focus on mental health and some of which do not. The Mental Health Commission of Canada is an initiative that will focus on both mental health and the criminal justice system. The Commission was born out of a recommendation from the Standing Senate Committee on Social Affairs, Science and Technology, in its report *Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada 2006*.[5] Launched in August 2007 as a not-for-profit corporation,[6] the Commission will be guided by eight advisory committees, one of which will focus specifically on mental health and the law.[43]

The National Crime Prevention Strategy (NCPS) is a Canadian initiative focused on crime prevention and less so on mental health. Established following a recommendation by the Standing Committee on Justice and the Solicitor General in 1994,[44] its mission is to "provide national leadership on effective and cost-effective ways to both prevent and reduce crime by addressing known risk factors in high-risk populations and places."[45](p. 1) The NCPS's approach to crime prevention is one of social development in that it focuses on risk and protective factors in the lives of children and youth.[46–48] Social development approaches hypothesize that "families and schools that provide youths with opportunities for involvement, that ensure that youth develop competency or skills for participation, and that consistently reinforce effort and skilful participation produce strong bonds between young people and these social units."[49](p. 26) Long-term evaluations suggest that they can be associated with positive mental health outcomes, including better functioning at school and work, better regulation of emotions, fewer symptoms of social phobia and fewer suicidal thoughts.[49] Evidence indicates that participants of social development programs are significantly less likely to be involved in criminal behaviour, have sold illegal drugs in the previous year or have an official court record as an adult.[49] Another study found that women who received social development programming throughout the course of their elementary education also reported fewer symptoms of general anxiety disorder than did men and women in control studies as adults.[49]

Effectiveness of Crime Prevention and Mental Health Promotion Initiatives

A report by the World Health Organization noted that mental health promotion and mental illness prevention can be associated with improved overall health, increased economic gain, productivity and social inclusion, decreased costs to social welfare and the health system and decreased risks for mental disorders.[50] Further, research indicates that many of the factors that are protective against criminal activity[51] are also protective against mental health problems.[3] Consistent

with the literature presented in this report, such factors include pro-social peer networks, supportive and caring parents, positive school climate and attachment to community.[10, 46]

Various programs in Canada and abroad have targeted such factors in an effort to prevent delinquency through mental health promotion. Although few evaluations of long-term health outcomes are available, Table 3 presents a sampling of Canadian and international programs aimed at promoting good mental health for the purposes of preventing delinquency and criminal activity. Some programs were focused on individual characteristics, while others focused on the family and school. Many of these programs have an early intervention focus and, as such, focus on children and youth. Many evaluations reflect short-term rather than long-term health outcomes. Evidence suggests a link between various skills-training programs within the family and school contexts with improved mental health outcomes and less delinquency among children and youth. For example:

- Two programs showed a link between self-control training among children with reduced aggressive behaviour and improvements in social behaviours.[52, 53]
- Another study found a link between family-skills training in early childhood with increased self-efficacy and reductions in juvenile delinquency in later childhood.[54]
- At the school-level, one study showed improvements in school and work functioning, decreased involvement in criminal activities and fewer mental health problems among youth receiving a school-based intervention.[49]
- Another study showed short-term improvements in terms of less delinquency[55] but no long-term differences in terms of having a criminal record.[56]

Table 3

Examples of Initiatives Aimed at Promoting Good Mental Health for the Purposes of Preventing Delinquency and Criminal Activity

Program	Target Group	Description	Short- or Long-Term Outcomes
Project Early Intervention[52] (Ottawa, Ontario)	Children aged 6 to 12 living in neighbourhoods at risk for delinquency (for example, low income households and geographically isolated areas).	Combines life skills training (for example, anger management and problem solving) with sports and recreation programs, homework club and counselling.	Less anxiety, shyness and social withdrawal; improved academic performance; less aggressive and acting-out behavioural characteristics.
The Banyan Community Services SNAP™ Under-12 Outreach Project[53] (Hamilton, Ontario)	Boys aged 6 to 12 who had previously committed offences and were at high-risk for repeat offending.	Training in self-control skills for boys and in child management techniques for parents.	Parents reported significant decreases in offending behaviour and improvement in social competencies.
Syracuse Family Development Research Project[54] (Syracuse, New York)	108 disadvantaged families.	Families received individualized daycare services, parental training and in-home support visits.	At 10-year follow-up, children showed more positive self-ratings, increased self-efficacy and reductions in juvenile delinquency. Parents were more encouraging. Fewer children in the intervention group were processed as probation cases (6% versus 22%). Justice system costs were lower for the intervention group ($12,111 versus $107,192).
Strong Families, Strong Children[57] (Moncton, New Brunswick)	Families with children aged 5 to 12 years who displayed risk factors associated with crime and victimization.	In-home support, family nurturing program, parent support group, social skills training, respite care and social programming.	Improved parental coping skills, family relationships, children's personal development and ability to deal with parenting issues. Children showed decreases in anger, inattention, anxiety, impulsiveness and aggression, and increases in happiness and daily functioning.
Seattle Social Development Project[49] (Seattle, Washington)	Children from 18 elementary schools in different neighbourhoods (including high-crime neighbourhoods).	Teacher training in classroom management, child social and emotional skill development and parent skills training.	At 9-year follow-up, students in intervention showed better functioning in school or at work, better regulation of emotions, decreased involvement in criminal activities and fewer social phobia symptoms and suicidal thoughts.
The Montréal Longitudinal Experimental Study[55, 56] (Montréal, Quebec)	Boys from families of low socio-economic status.	Social skills training for children, parenting skills training and teacher support/information.	At 4-year follow-up, boys in intervention showed less aggression in school, experienced fewer difficulties adjusting to school and committed less delinquency. At 15-year follow-up, there were no differences in whether or not boys in the intervention and control groups had a criminal record.
Bully Prevention Program[58] (Bergen, Norway)	2,500 elementary and junior high school students.	Counteracting bully/victim situations by exposing children to consistent messages from different people in different contexts.	Decreases in bullying behaviour, being the victim of bullying and in rates of fighting, vandalism, theft and truancy. Improvements in positive social relationships and positive attitudes towards school.

Section One Conclusions

The first section of the report looks at what mental health–related factors at the individual, family, school/peer and community levels are associated with delinquent and criminal activity. Scans of the policy and program landscape indicate that there are a number of initiatives across Canada that focus on either crime-prevention and mental health–related risk factors or mental health initiatives that include crime prevention as a component of their activities. While evidence indicates that many factors that protect against delinquency are also related to positive mental health, there is a lack of programs for which evaluations for long-term health outcomes have been conducted.

Given the focus on early identification of risk and protective factors associated with delinquency, many studies have focused on children and youth. Research shows that some factors increase the risk of delinquency for youth, while others appear to protect them from such behaviour. For example:

- At the individual level, risk factors for delinquency include low self-worth, hyperactivity and victimization. Protective factors against delinquency include having high levels of life satisfaction, optimism, emotional capability, being self-motivated and being able to manage stress.
- At the family and school/peer levels, risk factors include negative parenting styles and peer influences, minimal parent–child interaction, lack of school involvement, poor academic achievement and bullying. Protective factors include a parenting style that is nurturing and a school environment in which youth feel connected.
- At the community level, risk factors include living in neighbourhoods with high turnover of residents and high rates of violent crime, and feelings of hopelessness. Protective factors include feeling a positive bond to society.

Similiar findings were shown in analyses of NLSCY data CPHI conducted to examine differences in self-reported delinquent behaviour across selected determinants of mental health and criminal activity (see Table 4). Various individual, family, peer, school and community-related variables were split into two levels. One level represented a risk threshold and the other a protective threshold–both were then linked to an aggression outcome.

- Just over one-half (56%) of 3,768 responding youth reported no aggression. Compared to these youth, youth with identified protective factors reported higher rates of no aggression. Protective factors generally represented a *positive* behaviour, such as emotional capability, stress management, parental nurturance, liking school and being easily adaptable. The top five ranked protective factors against aggressive behaviour were those for which the number of youth reporting no aggression was the highest overall and significantly higher than the opposite level of the factor.
- In contrast, 10% of responding youth reported often being aggressive. Youth with identified risk factors were more likely to report often being aggressive compared to these youth. The top five risk factors for aggressive behaviour represent the presence of a *negative* behaviour, as opposed to the absence of a protective factor, and included being indirectly aggressive, hyperactive, reporting parental rejection or punitive parents and being anxious.
- The presence or absence of a learning disability was not related in either a protective or risk capacity to aggressive behaviour. Similarly, having two parents was not a significant protective factor and having one parent was not a significant risk factor.
- Table 4 highlights the value of both promoting protective factors and reducing risk factors as a means of addressing aggression in youth.

Table 4

Risk and Protective Factors Related to Specified Levels of Self-Reported Delinquent Behaviour, Youth Aged 12 to 15, 2004–2005

No Aggression: 56% of All Youth (C.I. 53%–59%)		Often Aggressive: 10% of All Youth (C.I. 8%–12%)	
Protective Factors	**Percent Who Report No Aggression**	**Risk Factors**	**Percent Who Report Often Being Aggressive**
High emotional capability	75%	Medium-high level of indirect aggression	31%
High stress-management skills	73%	High level of hyperactivity	27%
High level of parental nurturance	66%	High level of parental rejection	26%
Likes school	65%	Medium-high level of anxiety	25%
High adaptability skills	65%	High level of punitive parenting	21%
Highly self-motivated	63%	Negative peer influences	17%
High level of parental monitoring	62%	Not very involved at school	16%
Few negative peer influences	61%	Low connectedness with friends	16%
Medium-low level of punitive parenting	61%	Medium-low self-esteem	15%
Medium-low parental rejection	61%	Not very self-motivated	15%
High self-esteem	61%	Low level of parental nurturing	15%
Low level of anxiety	61%	Doesn't like school very much	14%
Highly connected with friends	61%	Low emotional capability	13%
Involved at school	60%	Poor stress-management skills	13%
Low level of indirect aggression	60%	Does not volunteer	12%
Medium-low level of hyperactivity	60%	Low parental monitoring	12%
Low reports of feeling like an outsider	59%	Low adaptability skills	11%
No learning disability	NS	Learning disability	NS
Two parents	NS	One parent	NS
Volunteers	NS	Feels like an outsider	NS

Notes:
"Protective factor": Significantly higher percentage reporting no aggression than for the opposite level of the given factor at $p<0.05$.
"Risk factor": Significantly higher percentage of reporting often being aggressive than for the opposite level of the given factor at $p<0.05$.
NS: Not significantly different than the opposite level of the factor for the specified aggressive behaviour.
C.I.: Confidence Interval

Source:
CPHI analysis of National Longitudinal Survey of Children and Youth (Cycle 6, 2004–2005), Statistics Canada.

Section One Key Messages and Information Gaps

What do we know?

- The individual and broader social determinants of mental health and involvement in criminal behaviour are numerous and interrelated. Many analyses are also based on correlational data, thereby limiting the conclusions that can be made about causality.
- Studies in the area of early childhood development show the effectiveness of some childhood interventions at reducing later criminal behaviour.
- Many studies have looked at mental health–related factors as risk factors for delinquency—few have looked at the mental health outcomes of those committing criminal acts.
- New CPHI analyses show that delinquent behaviour is more common among youth reporting high levels of parental rejection, indirect aggression, anxiety and hyperactivity. Rates of never engaging in delinquent behaviour (aggressive and property delinquency) were greatest among youth who reported high levels of parental nurturance, stress management and emotional capability.
- Environmental scanning of the policy and program landscape indicates that there are many programs with a crime-prevention focus; however, few have been evaluated, particularly in terms of mental health outcomes.

What do we still need to know?

- What changes in mental health factors over time are associated with increases or decreases in delinquency among youth?
- What mental health–related factors are associated with criminal behaviour among adults? Among specific sub-groups of the population, such as Aboriginal Peoples?
- Do punitive parenting practices result in more aggressive children or does aggressive behaviour in children result in more punitive parenting tendencies?
- What are the long-term impacts on mental health of existing policies and programs that include components of both crime prevention and mental health promotion?


2

2

Mental Illness and the Criminal Justice System

Most people with a mental illness or compromised mental health do not commit crimes. However, information from various sources indicates that there is a higher prevalence of mental illness among incarcerated individuals than among the general population. Given this, the second section of this report, which is organized into three parts, looks at those individuals who are or were involved with the criminal justice system and who have a mental illness.

- The first part of this section explores some of the characteristics that distinguish mentally ill patients with and without a link to the criminal justice system who were admitted to a mental health bed in Ontario.
- The second part of this section looks at people with a mental illness who have committed a crime and been diverted away from further involvement with the justice system.
- The section concludes with a look at people with a mental illness who have committed a crime and are incarcerated in a correctional facility. It examines the prevalence of mental illness among incarcerated adults, youth and Aboriginal Peoples. It also presents information on the prevalence of suicidal behaviour among incarcerated populations and the programming available to offenders while in prison and upon release.

CIHI's Ontario Mental Health Reporting System (OMHRS)

This database collects and analyzes information about clients admitted to a mental health bed at 70 general hospitals and specialty psychiatric facilities in Ontario. OMHRS incorporates the Resident Assessment Instrument for Mental Health© (RAI-MH) and collects information in the areas of administration, demographics, level of function, mental and physical health, social support and service use. Information is collected at admission, discharge, if there is a significant change in status and every three months for longer-stay clients.

Characteristics of Adults With a Mental Illness and a History of Involvement With the Criminal Justice System

Compared to the general population, research shows that people who are involved with the criminal justice system are more likely to suffer from a mental illness or addiction. Studies also show an overlap between people with a mental illness and a history of involvement with both the criminal justice system and mental health facilities. To better understand these links, CPHI looked at data from CIHI's Ontario Mental Health Reporting System (OMHRS) database to explore the characteristics of two groups of patients admitted to a mental health bed:

- "Forensic admissions": Patients for whom the reason for admission listed that they were involved or charged with criminal activity.[59]
- "Patients with a criminal history": Patients were reported (by themselves or others) to have had some police intervention for participation in a violent or non-violent criminal activity (excluding civil litigation).[59]

Of 30,606 unique patients admitted to mental health beds between April 1, 2006, and March 31, 2007, 9% were forensic admissions and 28% of patients admitted were reported to have some criminal history. Of note, some forensic patients (17%) do not have a reported criminal history.

A number of socio-demographic characteristics distinguish patients admitted for forensic reasons from other patients. Table 5 shows that forensic patients tended to be younger and a higher proportion were male, never married and had lower education levels and less stable housing. Forty-five percent of forensic patients had first stayed in a psychiatric hospital before the age of 25, compared with 34% of other patients. Income also distinguished the two groups. The main income sources for forensic patients were disability (22%) and social assistance (21%). For the non-forensic patients, pension (29%) and employment (25%) were the main income sources. Although not presented here, the socio-demographic characteristics for the forensic group were similar to the larger group of patients reporting a past criminal history.

Further, after taking the others into account, each socio-demographic factor was independently related to the likelihood that a patient was recorded as a forensic patient. Patients who were younger, male, single or who self-reported Inuit, Métis or North American Indian ancestry were significantly more likely to be forensic patients. Patients with higher education, prior housing that was stable or who reported income sources of employment and pension were less likely to be forensic patients. Of all the factors, sex was most strongly related to being a forensic admission—males were over three times more likely to be forensic patients than females (OR = 3.01,[iii] C.I.: 2.7–3.3).

iii "OR" means odds ratio.

Table 5

Socio-Demographic Characteristics Distinguishing Forensic and Non-Forensic Patients Admitted to a Mental Health Bed, 2006–2007

	Forensic	Non-Forensic
Average age	40 years	45 years
Male	77%	48%
Never married	70%	46%
High school education or less	67%	54%
Had a temporary residence prior to admission	32%	24%
Homeless prior to admission	7%	3%
Reported Inuit, Métis or North American Indian ancestry	6%	3%

Most Prevalent Diagnoses Among Patients Admitted to a Mental Health Bed

The most prevalent diagnosis differed for forensic and non-forensic admissions. For non-forensic admissions, mood disorder was the most common diagnosis (53%), followed by schizophrenia (33%). For forensic admissions, schizophrenia was the most common diagnosis (54%), followed by substance-related disorders (38%) (see Table 6). Substance abuse was a co-occurring disorder with schizophrenia for 17% of all forensic admission patients, compared to 5% of non-forensic admissions.

Differences in diagnoses were also noted among patients with a criminal history. Patients who reported a concurrent substance abuse disorder were more than twice as likely to report having a criminal history than patients without this concurrent disorder [OR = 2.65, C.I.: 2.50–2.81]. After controlling for education, income, age and sex, patients diagnosed with a substance abuse disorder were more than two times more likely to have a criminal history [OR = 2.33, C.I.: 2.20–2.47] than patients without a substance abuse disorder. Patients with schizophrenia were almost one and a half times more likely to have a criminal history after income, education, age and sex were taken into account [OR = 1.40, C.I.: 1.33–1.48].

Table 6

Diagnoses of Schizophrenia and Substance Disorder Among Forensic and Non-Forensic Patients Admitted to a Mental Health Bed, 2006–2007

	Non-Forensic Reason for Admission n = 27,735		Forensic Reason for Admission n = 2,871		Total N = 30,606	
	Count		Count		Count	
Schizophrenia	9,133	33%	1,550	54%	10,683	35%
Substance Disorder	6,876	25%	1,104	38%	7,980	26%
Both	1,278	5%	481	17%	1,759	6%

Source:
CPHI analysis of Ontario Mental Health Reporting System (OMHRS), 2006–2007, CIHI.

Risk Factors Among Patients Admitted to a Mental Health Bed With a Criminal History

Compared to patients with no criminal history, data show that patients admitted to a mental health bed with a criminal history reported significantly more risk factors both prior to admission and upon discharge.

Upon admission, patients with a criminal history reported a more pronounced history of mental illness and service use, as well as high rates of substance use, victimization, stressful life events and unstable relationships.

- History of service use: 69% had a previous admission and more than one in four patients reported six or more previous mental health admissions.
- Substance use: Reported rates of substance use were approximately twice as high for patients listing some criminal history on initial assessment.
- Victims of crime: Patients with a criminal history reported a significantly greater victimization rate (38% versus 26% of non-criminal history).
- Life events: Patients with a criminal history were more likely to have failed or dropped out of an education program (41% versus 25% of non-criminal history) and suffered a serious injury or physical impairment (28% versus 22% of non-criminal history).
- Unstable relationships: For 44% of patients with a criminal history, the patient, family or friends indicated the relationship between the patient and immediate family was dysfunctional (versus 34% of others). In addition, 19% are reported to be hostile towards their family, compared with 12% of patients reporting no criminal history.

At discharge, patients with a criminal history also experienced greater risk as related to lack of social support and poor medication adherence (see Table 7).

- In the month before they were admitted, patients with a criminal history reported having more problems adhering to medication. Almost one in three patients (31%) reported poor adherence (<80% of the time) compared with one in five patients with no criminal history.
- Compared to 6% of patients with no criminal history, 11% of patients with a criminal history did not expect to have supervision in place for personal safety upon release.
- In both groups, the top two expected living arrangements were private and assisted living. However, the next most frequent expected living arrangements for the criminal history group were: being homeless, renting a room, going to a correctional facility or unknown. Of the nearly 26,000 patients who identified an expected living arrangement at discharge, over 500 were expected to be homeless on discharge and approximately 200 were expected to go to correctional facilities.

Table 7

Comparison of Discharge Planning Risks Between Patients Admitted to a Mental Health Bed With and Without a Criminal History, 2006–2007

	Criminal History	No Criminal History
Medication Adherence		
Reported always adhering to prescribed medication in the month prior to admission	30%	43%
Reported adhering to prescribed medications less than 80% of the time in the month prior to admission	31%	21%
Intentionally misused medication in last three months	17%	13%
Social Support		
Patient has no support person who feels positive about the discharge	23%	18%
Absence of family or friends to help provide crisis support on discharge	10%	6%
Absence of family or friends to help provide supervision needed for personal safety	11%	6%
Initial Living Arrangement Expected on Release		
Private home	66%	77%
Assisted living/group home/board and care	11%	6%
Homeless	4%	1%
Rented room	4%	3%
Correctional facility	3%	<1%
Unknown	3%	2%

Note:
All comparisons are significantly different between groups at $p<0.05$.

Source:
CPHI analysis of Ontario Mental Health Reporting System (OMHRS), 2006–2007, CIHI.

The population for whom the OMHRS database collects data is diverse. It can include individuals without any past involvement with the criminal justice system, those with a past criminal history or those with a current involvement with the justice system. This latter group is one that may have come to the attention of law enforcement, emergency medical services and so on as a result of the symptoms and behaviour related to their mental illness. In that context, these individuals may have been diverted from further involvement with the criminal justice system and brought to the attention of mental health personnel. The following section takes a more in-depth look at the various means by which people with a mental illness who have committed a crime may be diverted from further involvement in the criminal justice system.

Diverting People With a Mental Illness From the Criminal Justice System

Since the 1960s, Canada's psychiatric services have undergone various restructurings. These restructurings have been associated with the release of many persons with a mental illness into the community from mental health institutions.[60] There is no clear consensus about the link between this process and potential involvement with the criminal justice system.[61] As an alternative to incarceration, the Criminal Code of Canada allows the use of other measures, including treatment, to be applied to cases involving persons with a mental illness.[61] Mental health diversion is one such alternative.[61]

Through the administration of appropriate community-based treatment and support resources, diversion policies aim to intervene during the various points at which persons with a mental illness may come into contact with the criminal justice system.[62] In general, there are three categories of mental health diversion programs across Canada:

- Pre-arrest or pre-booking diversion;
- Court diversion; and
- Mental health courts.[61, iv]

Pre-Arrest or Pre-Booking Diversion Programs

In these programs, police officers assess a situation and, at their discretion, lay charges for minor offences involving people suspected of having a mental illness.[61] These programs aim to connect persons with a mental illness directly with various community mental health services in lieu of arresting them and laying charges.[62, 63]

Diversion programs of this form range from informal police discretion to formal crisis intervention teams consisting of police officers and mental health professionals, such as Vancouver's Car 87 Mental Health Car,[64] Edmonton's Police and Crisis Team (PACT),[65] Hamilton's Crisis Outreach and Support Team (COAST)[66] and Halifax's Mental Health Mobile Crisis Team (MHMCT).[67] Given the time-limited and often crisis-oriented nature of these programs, evaluations typically involve process-related information (for example, number of people served, linkages to longer-term services, number of emergency room visits and charges laid). Little is known about the long-term health impacts of such programs.

iv Specialized Drug Treatment Courts are another diversion alternative currently operating in several cities including Vancouver, Edmonton, Regina, Winnipeg, Toronto and Ottawa. Due to scoping issues, these programs are not discussed here.

Court Diversion Programs

Court diversion programs occur after charges have been laid. These programs aim to divert low-risk/non-violent adult offenders with a mental disorder away from the criminal justice system to supportive community-based health services.[68] The court diversion process typically includes: appointment of counsel; mental health assessment; consultation with victims; and review of the charges, which may then lead to a decision to divert and a referral to appropriate services in the community.[61] Contingent on this process, the person with a mental illness must agree to enter mental health treatment.[61]

Research on court diversion programs in rural and urban Ontario shows low recidivism rates (2% and 3% in urban and rural areas, respectively) for persons with mental illness who successfully enter into agreed-upon diversion programs.[69] Formal evaluation of participants referred to the Calgary Diversion Pilot Project from January 2002 to June 2003 shows decreases in complaints resulting in charges and actual charges, court appearances, admissions to/discharges from hospital, days spent in hospital and fewer visits to emergency departments.[68] A comparison of the total police and health region costs indicates that costs arising in the nine months following referral to the diversion program were, on average, more than $1,700 less per person than the costs per person arising nine months prior to referral (when the costs of delivering the program are taken into account).[68]

Mental Health Courts

Mental health courts attempt a rehabilitative response over legal sanctions and have four main objectives: diversion away from the criminal justice system; expedition of the assessment of the accused's fitness to stand trial; treatment of the accused's mental disorder; and reduction of recidivism among persons with mental illness.[62] Mental health courts operate differently based on the needs and resources available in the context in which they are established.[62]

The first Canadian mental health court began operating in Toronto in 1998 and is currently Canada's only full-time mental health court. It focuses on expediting the assessment and treatment of persons with mental illness who are unfit to stand trial.[62, 72] Mental health courts also assist persons with mental illness with bail hearings, guilty pleas and procedures involved in pleading not criminally responsible on account of mental disorder.[62] There had been no formal evaluation of the Toronto mental health court at the time this report was published.[72]

Youth Criminal Justice Act

In April 2003, the *Youth Criminal Justice Act* (YCJA) was enacted.[70] One of the YCJA's goals was to divert youth who had committed non-violent and minor crimes away from the formal criminal justice system and the court process by applying the following sentencing options: reprimand, intensive support and supervision orders, attendance orders, deferred custody and supervision orders, and intensive rehabilitative custody and supervision orders.[71] It contains mental health provisions that protect young people from being detained if in need of mental health measures. For example, "pre-trial detention is not to be used as a substitute for child protection, mental health, or other social measures."[71](p. 4)

Other cities, such as Sudbury, Ontario, and Saint John, New Brunswick, also operate mental health court programs.[62] Saint John's mental health court deals with persons whose offence is related to their illness, who consent to participate in the program, who are fit to stand trial and who are criminally responsible for their offence.[73] Upon acceptance into the program, individuals are required to adhere to an individualized treatment program and, upon completion, their charges are withdrawn or they receive a non-custodial sentence.[73] The number of cases being handled by the Saint John mental health court has been increasing since its inception in 2000.[74] Preliminary evaluations have demonstrated the following:

- Seventy-six percent of participants completed the program, resulting in charges being dropped or avoiding incarceration. In comparison, all persons with mental illness processed through the regular court system were convicted and 64% were incarcerated.[75]
- Compared to persons with mental illness in the regular court system, participants spent significantly more time with mental health professionals and in community mental health services as opposed to in jail.[75]

Outcome evaluations of diversion programs are sparse. However, emerging evidence indicates that diversion programs do not increase risk to public safety and result in diverted participants being more likely to spend less time in jail; spend more time in the community; and receive more treatment such as counselling sessions, medications or hospitalization.[76] Reviews indicate that elements related to the successful implementation of diversion programs include early identification of clients,[63] provision of integrated services through inter-agency/governmental collaboration, regular meetings between key providers[61, 63, 77] and case-manager involvement across sectors.[61, 77]

Review Board Systems in Canada

If not diverted through the above-mentioned diversion programs, individuals who are charged with a criminal offence and have a mental illness can still be held criminally responsible for their offence.[78] However, an assessment of the individual's mental condition may be ordered[61] and some may be found not criminally responsible on account of mental disorder (NCRMD) or unfit to stand trial (UST).[78] These individuals are diverted to a provincial/territorial review board, which is a tribunal chaired by a judicial representative and includes at least one psychiatrist. The review board's goal is to decide upon a disposition that both protects the public and addresses the mental disorder.[78]

Research involving seven Canadian jurisdictions[v] shows that when taking into account the number of people that were released and admitted, this population grew from less than 500 in 1992 to nearly 2,500 in 2004.[78] Schizophrenia (53%), substance abuse disorders (29%) and affective disorders (25%) were the most common diagnoses. Of cases admitted in 1992–1993, individuals found to be NCRMD/UST were most likely to spend between 1 and 5 years in the review board system (27%); 23% stayed for 10 years or more. Males, Aboriginal Peoples, those diagnosed with an affective disorder and those committing sexual offences served longer periods of time.[78]

Homelessness, Mental Illness and Criminal Behaviour

CPHI's report, *Improving the Health of Canadians: Mental Health and Homelessness*,[4] presented research and data on the association between mental health, mental illness and homelessness. Research cited in this report showed that several types of mental illness, substance abuse and suicidal behaviour were more common among the homeless than among the general population. One area not covered in that report was the links between these outcomes, homelessness and crime. While a thorough discussion of this literature base is beyond the scope of this report, research shows the presence of various links. For example:

- In British Columbia, 68% of youth in custody reported that they had run away from or were forced to leave their homes in the year prior to custody; 46% reported being homeless in the past year.[28]
- A literature review noted that more than half of people charged with misdemeanours were homeless or living in unstable housing before their arrest.[79] Consistent with this, research shows that Canada's federal inmates reported higher rates of unstable housing than the general population.[80]
- In the U.S., a study of inmates in San Francisco found that 16% of all episodes of incarceration involved someone who was homeless; inmates had a mental disorder diagnosis in 18% of these episodes.[81] Homeless inmates were more likely than non-homeless inmates to be diagnosed with a mental disorder and a co-occurring mental disorder and substance-related disorder; the latter were also more likely to have multiple episodes of incarceration than those without a co-occurring disorder.[81]

In terms of discharge planning, a recent report noted ". . . there is a bi-directional relationship between homelessness and incarceration."[82] (p. 87) Homeless men are more vulnerable to involvement in the justice system due to poverty, substance use, economic survival strategies and greater surveillance by law enforcement; in turn, ". . . the prison experience itself may place releasees at risk of becoming homeless."[82] (p. 87)

v Prince Edward Island, Quebec, Ontario, Alberta, British Columbia, Nunavut and the Yukon.

Mental Illness Among Offenders in Correctional Facilities

Published assessments of the health needs of federal inmates in Canada noted a number of differences between inmates and the general population in terms of socio-demographic characteristics and various determinants of health. Inmates are younger on average and predominantly male, and Aboriginal Peoples are over-represented.[80] Inmates are also characterized by lower rates of completed education, lower literacy levels, poorer employment histories, financial difficulties, unstable housing, poor attachments with social support resources and extensive criminal histories.[80]

Research shows that the prison environment itself has been linked to mental health outcomes, as it is characterized by stress-inducing factors such as, but not limited to, high risk of violence; separation from social support networks; concern for personal safety; and discrimination based on race, religion, sexual orientation or type of offence.[80] Existing data of federal inmates indicate that some inmates—both male and female—show signs of hopelessness/depression at intake.[80] Further, existing mental disorders may also be worsened with stress and insufficient coping responses.[80] Of note, however, is the fact that most studies of prevalence rates are cross-sectional in nature. It is thus difficult to identify when a given mental illness may have been a precursor to incarceration and when, or if, it developed or worsened with incarceration.

Prevalence of Mental Illness Among Adults in Correctional Facilities

In many cases, the symptoms and behaviour associated with a mental illness are what bring individuals to the attention of police and medical personnel. For example, a review of Canadian and international literature estimated that about half of offenders suffering from psychoses were under the influence of delusions when they committed a violent crime.[83] A Nova Scotia study found that 85% of surveyed offenders reported that drugs and alcohol were involved in the crimes they committed.[84]

Most people with a mental illness or compromised mental health do not commit crimes; however, information from various sources indicates there is a higher prevalence of certain types of mental illnesses among incarcerated adults compared to the general population (for example, psychotic, major depressive, anxiety and substance abuse disorders).[3, 8, 9] Table 8 presents an overview of known prevalence rates for a number of mental disorders among various incarcerated populations across Canada and for the general adult population.

Table 8

Prevalence of Mental Illness Among the General and Incarcerated Population, Adults

Disorder	General Adult Canadian Population	Incarcerated Adult Population
Psychotic	Less than 1% of adults report being professionally diagnosed with schizophrenia.*[3]	A literature review reported that rates of schizophrenia ranged from 1% to 8% in six Canadian studies.[9]
Major Depressive	Proportion who met criteria for major depression In past 12 months: 7% of women and 4% of men (25 to 44 years)[3] In lifetime: 17% of women and 10% of men (25 to 44 years)[3]	In Edmonton, 17% and 14% of males (18 to 44 years) reported major depression in their lifetime and in the last six months, respectively.[8] A systematic review of 31 international surveys (including Canada) found that 12% of females and 10% of males had a diagnosis of major depression in the last six months.[85]
Anxiety	Proportion who met criteria for one of selected anxiety disorders In past 12 months: 7% of women and 4% of men (25 to 44 years)[3] In lifetime: 15 % of women and 11% of men (25 to 44 years)[3]	An Edmonton study found that 16% and 12% of males (18 to 44 years) reported a lifetime and 6-month prevalence, respectively, of an anxiety disorder.[8] In Abbotsford, British Columbia, 17% of males met 1-month criteria for an anxiety disorder; 1% reported an anxiety disorder in their lifetime.[9]
Antisocial Personality Disorder	Estimated at 9% among males in general population (18 to 44 years).[8]	In Edmonton, 57% of males (18 to 44 years) reported antisocial personality disorder.[8]
Substance Abuse	Proportion who met criteria for alcohol or illicit drug dependence In past 12 months: 2% of women and 5% of men (25 to 44 years)[3]	In an Edmonton study of males (18 to 44 years): • 51% and 79%, respectively, reported 6-month and lifetime prevalence of alcohol abuse[8] • 24% and 51%, respectively, reported 6-month and lifetime prevalence of drug abuse[8]
Post-Traumatic Stress Disorder (PTSD)	PTSD estimated to affect 1 in 10 Canadians.[86]	In Abbotsford, British Columbia, 4% of males had a diagnosis of PTSD.[9]
Fetal Alcohol Spectrum Disorder (FASD)	Prevalence of FAS estimated to be between 0.5 and 2 per 1,000 births in the U.S.[87] **Note**: Canadian data were not available at the time this report was published.	A study of Canada's provincial/territorial corrections facilities found that there were 13 identified cases of FAS among 148,979 offenders (0.087 per 1,000).[88]

Notes:
*Data for rates of psychotic, depressive, anxiety, and substance abuse disorders are based on self-reported responses to Statistics Canada's 2002 Mental Health and Well-being Survey (CCHS, Cycle 1.2).

Given the variability in the collection methodologies, sampling strategies and sources from which estimates were drawn (for example, single studies versus systematic reviews), comparisons and conclusions should be made with caution.

"FASD" is an umbrella term that covers several alcohol-related medical diagnoses, including Fetal Alcohol Syndrome (FAS) and FAE (Fetal Alcohol Effects). According to Canadian guidelines for diagnosis, risk factors for prenatal alcohol consumption include higher maternal age, lower education level and socio-economic status, prenatal exposure to drugs and tobacco, reduced access to prenatal and postnatal care and poor nutrition.[89]

Prevalence of Mental Illness Among Youth in Correctional Facilities

Studies examining the prevalence of mental illness among incarcerated youth report similar patterns to incarcerated adults. Studies show that rates of depression, anxiety disorders, attention-deficit/hyperactivity disorder (ADHD) and substance abuse disorders are higher among youth in custody than among youth in the general population (see Table 9). Other disorders not discussed in this section but which some studies also show are prevalent among youth in custody include conduct disorder, post-traumatic stress disorder (PTSD) and schizophrenia. For example, a Toronto study found that 31% of incarcerated youth had conduct disorder and 25% had

Table 9

Prevalence of Mental Illness Among the General and Incarcerated Population, Youth

Disorder	Canadian Young Adult Population	Youth Incarcerated or In Custody
Depressive	Proportion who met criteria for major depression* In past 12 months: 5% of males and 8% of females (15 to 24 years)[3] In lifetime: 7% of males and 14% of females (15 to 24 years)[3]	In Toronto, 31% reported a current diagnosis of depression compared to 4% of non-incarcerated youth.[27] In B.C., 19% of incarcerated youth reported a diagnosis of depression.[28]
Anxiety	Proportion who met criteria for one of selected anxiety disorders In past 12 months: 4% of males and 9% of females (15 to 24 years)[3] In lifetime: 10% of males and 15% of females (15 to 24 years)[3]	In Maine, U.S., 5% of males and 9% of females exceeded diagnostic criteria for panic attacks in the past 12 months.[90]
Attention Deficit Hyperactivity (ADHD)	Between 5% and 10% of Canadian children are estimated to have ADHD.[91]	In Toronto, 27% of incarcerated youth reported ADHD compared to 2% of non-incarcerated youth.[27] In B.C., 33% of youth in custody reported having an ADHD diagnosis.[28]
Substance Abuse	4% of males and 2% of females (15 to 24 years) met criteria for illicit drug dependence in past 12 months[3] 10% of males and 4% of females (15 to 24 years) met criteria for alcohol dependence in past 12 months[3]	In B.C., 22% of incarcerated youth reported being diagnosed with an addiction in their lifetime.[28] In Toronto, 39% of incarcerated youth met criteria for alcohol dependence.[27]
Fetal Alcohol Spectrum Disorder (FASD)	Canadian youth-specific data were not available at the time this report was published.	12% of B.C. youth in custody reported a diagnosis of FAS.[28]

Notes:
*Data for rates of depressive, anxiety, and substance abuse disorders are based on responses to Statistics Canada's 2002 Mental Health and Well-being Survey (CCHS, Cycle 1.2).
Given the variability in the collection methodologies, sampling strategies and sources from which estimates were drawn (for example, single studies versus systematic reviews), comparisons and conclusions should be made with caution.

PTSD; in comparison, 4% of youth in a community sample reported conduct disorder and no youth reported PTSD.[27] In B.C., 6% of youth in custody reported having been diagnosed with schizophrenia[28]—data on the prevalence of psychotic disorders among youth in the general population were not available at the time this report was published.

Mental Illness Among Aboriginal Peoples in Correctional Facilities

Aboriginal Peoples are over-represented in the Canadian prison system.[80, 92] Data from 2002 indicate that 17% of males and 26% of female inmates are Aboriginal.[80] In 2006, Aboriginal Peoples made up roughly 4% of the adult population in Canada.[93] Similar findings have been noted for Aboriginal youth. For example, in 2004, 47% of incarcerated youth in B.C. and 8% of B.C. youth in the general population reported Aboriginal status, respectively. [28]

Canadian prevalence rates of mental illness among incarcerated Aboriginal populations are difficult to find. One Canadian study reported that 92% of Aboriginal federal offenders required help for a substance abuse problem; 96% reported a personal or emotional issue that needed attention.[92] Data from the 1995 Aboriginal Offender Survey showed that many Aboriginal federal inmates experienced abuse as children (45% physically abused, 21% sexually abused), lived in severe poverty (35%), experienced parental absence (41%), used drugs (60%) and alcohol (58%) and had childhood behaviour problems (57%).[94]

Consistent with previously published profiles of Aboriginal inmates,[92] a recent assessment of the health needs of federal inmates in Canada noted differences between Aboriginal offenders and non-Aboriginal offenders in terms of socio-demographic characteristics and various determinants of health.[80] Compared to non-Aboriginal inmates, Aboriginal inmates tend to have lower rates of completed education, lower employment histories, higher rates of unstable housing, higher rates of repeat offending and higher rates of violent offences.[80] The Aboriginal inmate population also comprises more females than the non-Aboriginal inmate population.[80]

Suicidal Behaviour in Correctional Facilities

According to the 2002 Mental Health and Well-Being Survey (CCHS 1.2), 12% of males and 19% of females (15 to 24 years) reported having suicidal thoughts at some point in their lifetime. Fewer—2% of males and 6% of females (15 to 24 years)—reported a suicide attempt.[3] Studies show higher rates of suicidal behaviour among incarcerated populations. Analyses of 2002 data collected from federal inmates in Canada (12,170 males, 347 females) show that the proportion of male inmates who reported a suicide attempt in the previous five years ranged from 10% in minimum security to 16% in maximum security; the proportion was higher among female inmates, ranging from 11% to 41%.[80]

Among youth, specifically, a literature review found that rates of suicidal thoughts ranged from 9% to 10%, with a lifetime prevalence of 34%; rates of suicidality were higher in girls compared to boys.[95] In B.C., one study found that 21% of incarcerated youth thought about killing themselves in the previous year and 13% reported having attempted suicide. Suicide attempts were more common in girls than in boys, as well as among incarcerated Aboriginal youth compared to incarcerated non-Aboriginal youth (18% versus 11%).[28]

Canada's Correctional Facilities at the Provincial/ Territorial and Federal Levels

Provincial/Territorial Level

Offenders convicted for sentences of less than two years are referred to prisons and/or community supervision programs implemented by the provinces and territories.[96]

- 2004–2005 admissions = 342,018 (240,786 custodial supervision[vi] and 101,232 community supervision[vii])[97]

Federal Level

Offenders convicted for sentences of two years or more are referred to the Correctional Service of Canada (CSC),[98] which is responsible for taking care of inmates, providing rehabilitative programming, preparing inmates for release and implementing parole, statutory release supervision and long-term supervision of offenders.[99]

- 2004–2005 admissions = 15,152 (7,826 custodial supervision-sentenced and 7,326 community releases—CSC[viii])[97]

Exchange of Service Agreements: Agreements established at the federal and provincial/territorial levels allow for offenders to be transferred from one jurisdictional level to another in spite of the two-year rule.[100] These agreements create the opportunity to implement options that better suit the needs of the public and the offender. They can permit federal offenders the option of being held in a provincial institution for better access to programs, social support networks or family. Alternatively, provincial offenders may be held in federal institutions for similar reasons or for the increased security that federal institutions can provide.[100]

vi Includes sentenced, on remand and temporary detention.

vii Includes probation, parole and conditional sentence.

viii Category represents movement from custody to federal conditional release and includes provincial/territorial and federal offenders on parole and federal offenders on statutory release. Excludes offenders released on warrant.

Provincial and Territorial Approaches to Address the Mental Health Needs of Offenders

Our policy scanning found some recognition of mental health issues in the administration of provincial/territorial correctional systems. Some provinces are focused on the development of protocols and programming to manage and support offenders with a mental illness, and are working with community agencies who assist offenders in meeting their housing, literacy and employment needs.[101] Others are focused on improving service coordination and accessibility, bringing together the justice, civil protection and health and social services networks.[102] Some provinces and territories also provide targeted Aboriginal justice initiatives[103] that, in some cases, involve members of Aboriginal communities in the design and delivery of Aboriginal programming.[104]

Many jurisdictions offer programming related to specific mental health issues for offenders in both institutional and/or supervised community settings, including substance abuse treatment;[105–110, 114] violence prevention;[105–107, 109, 111, 112, 114] and stress and anger management.[105–107, 110, 111, 113, 114]

Despite this array of programming, our scanning did not find any empirical evaluations specific to mental health–related outcome measures or the accessibility of programs to offenders—with or without mental health issues.

Remand Status Individuals are on remand when charged with an offence and held in custody to await trial or when convicted of an offence and awaiting sentencing.[115] The custody of individuals on remand is a provincial/territorial responsibility.[115] Research shows an increase in the number of offenders on remand and a decrease in the number of sentenced offenders in recent years. In 2005–2006, the number of Canadian adults on remand was 10,670, which for the first time was higher than the number of convicted offenders serving a sentence in provincial/territorial institutions (9,570).[116] Reports indicate that programs and services typically offered to convicted offenders are often not available for those on remand.[115]

Programs in the Correctional Service of Canada

Under the premise that programs that address factors related to re-offending—such as family violence, level of education, and anger and emotion-management abilities—contribute to the safe reintegration of offenders into society,[117] CSC correctional programs focus on living skills, basic adult education and skills training, violence prevention and substance abuse treatment, to name a few. Descriptions of some of the programs that have a mental health–related focus and for which evaluations were conducted are provided below. In most cases, evaluations were conducted by researchers within the CSC's Research Branch.

- The Reasoning and Rehabilitation, Revised Program—formerly known as the Cognitive Skills Training program—aims to improve interpersonal problem-solving, self-control, self-management, assertiveness, social functioning, social perspective taking, critical reasoning, cognitive style and values reasoning.[118] Evaluations indicate an increase in the rate of granting of discretionary release and decreased readmission and reconviction rates of offenders.[119]
- The Anger and Emotions Management Program aims to teach offenders to manage negative emotions, reduce aggressive behaviour and develop skills involving self-management and control, problem-solving, communication, identifying high-risk situations and pro-social behaviour.[120] Evaluations show reduction in non-violent and violent recidivism among offenders at high risk of recidivism who successfully complete this program.[120, 121]
- Some interventions within the CSC's Violence Prevention Program (VPP) include change processes, exploring the origins of and re-formulating attitudes toward violence, anger and stress management, problem solving, reducing victimization and family violence, conflict resolution and restructuring the lifestyle triggers of violence and self-control.[122] Compared to pre-program periods, offenders who completed the VPP participated in fewer incidents that seriously violated institutional rules.[123] Results also show a significant reduction in the rate of violent recidivism, but only for those who complete the program.[123]
- Intensive Support Units (ISU) for Federal Offenders with Substance Abuse Problems aim to address substance abuse issues by creating safe environments with trained personnel.[124] Offenders choosing to live in an ISU must sign a contract stating abstinence from substance use, follow the rules and accept a level of drug and alcohol monitoring that is greater than that specified by Canadian law.[124] Compared to a comparison group and participants involuntarily discharged from the program, a greater proportion of inmates who successfully completed the program were granted discretionary release into the community; successful program participants were also less likely to return to custody and remained in the community the longest.[124]
- The CSC also offers mental health–oriented programming for female offenders dealing with emotional distress, severe behavioural difficulties,[125] basic skill deficits and cognitive challenges resulting from severe psychiatric disabilities.[126] Goals of these programs include: better understanding of behaviour patterns; better control over emotions and actions; decreased risk of recidivism;[125] and enhancing life skills, quality of life and feelings of empowerment.[125, 126] Preliminary evaluations indicate that many program participants feel that rehabilitative goals are being met or are in the process of being met;[125, 126] they are learning new skills related to more positive behaviour and decision-making; and they have increased confidence, self-esteem and independence.[126]

Accessibility of Correctional Programs

Evidence specific to CSC programming indicates potential for rehabilitating and treating offenders, assisting in their re-entry into the community and contributing to public safety and security. However, various independent bodies, such as the Standing Senate Committee on Social Affairs, Science and Technology and the Office of the Correctional Investigator, have noted concerns about the accessibility of federal correctional programming,[127] the timeliness of mental health assessments and treatment,[5] the quality of existing standards of care and the training of correctional staff to appropriately respond to mental health–related behaviours among offenders.[5, 127] In April 2007, Public Safety Canada appointed an independent review panel to assess the work of CSC, including the availability and effectiveness of rehabilitation programming, support mechanisms and mental health programs and services in institutional settings and in the community post-release.[128]

Mental Health Services in the Federal Correctional System

A recent assessment of the health needs of federal inmates noted three main reasons for providing mental health care within the correctional system:

1) To reduce the debilitating effects of mental illness so that the inmate can effectively participate in the rehabilitation process;
2) To decrease suffering from mental illness; and
3) To keep prisons safe for other inmates, staff, volunteers and visitors.[80]

The goals of treatment for mental health disorders are to reduce the distress from mental illness, while the goals of correctional treatment are to reduce recidivism.[80]

One of the CSC's objectives is to provide psychological services for the resolution of mental health problems, development of socially acceptable behaviour and prevention of relapse of problematic symptoms.[129] Federal offenders who have been properly identified as having significant mental health problems and who require psychological/psychiatric services may be treated in one of five regional treatment centres. Once stable, they are transferred to a regular institution where health care personnel oversee offenders.[5]

In 2007, the CSC launched a mental health strategy to provide appropriate services to offenders during incarceration and upon release.[130] The strategy, which at the time of this report's publication had not been evaluated, has five components:

- Enhancing clinical screening and mental health assessments at intake;
- Providing basic primary mental health care in all institutions;
- Establishing intermediate health care units in select institutions;
- Enhancing the capacity of the five regional treatment centres to provide mental health services; and
- Continuing to implement the Community Mental Health Initiative (CMHI), which aims to prepare offenders for release into the community by strengthening the continuum of specialized mental health support that is provided in the community to offenders with a serious mental health disorder after release.[130]

Community-Based Mental Health Programs for Offenders

Many offenders with a mental illness diagnosis undergoing treatment in correctional institutions will eventually be released back into the community. To remain stable and functional in their day-to-day activities, these individuals will often require follow-up services and continued access to mental health services. In the interests of public safety, CSC attempts to connect releasees with a psychiatrist, clinic or hospital, as well as engage community-based services in the release plans of offenders with continuing needs.[5] One study noted several benefits of community-based programs over other alternatives (for example, long-term hospitalization and incarceration), such as lower expenses, reduced recidivism rates and prevention of skills-loss.[131] An international multi-site study involving Canada has suggested that successful community-based programs share the following common features:

- They are intense, highly structured and contain multiple components targeting specific problems;
- Treating clinicians assume multiple roles, including treating patient's mental disorder, preventing violence and crime and taking responsibility for patient's compliance with the program;
- Treating clinicians have the authority to re-hospitalize patients against their will if they are judged to be at risk, to be committing other crimes, or to be in need of acute psychiatric symptom treatment; and
- Treating clinicians have the option to obtain court orders in order to ensure compliance with the treatment program.[131]

Section Two Conclusions

Information presented in the second section of this report focused on individuals who are or were involved with the criminal justice system and who have a mental illness.

The section began with a look at individuals with a mental illness who were admitted to a mental health bed and have either a present or past involvement with the criminal justice system. Analyses of data from CIHI's Ontario Mental Health Reporting System database show some form of involvement with the criminal justice system was one of the underlying reasons for admission to a mental health bed among 9% of patients between April 2006 and March 2007. Schizophrenia and substance abuse disorders were the two most prevalent diagnoses among these patients. These analyses also highlight the role of such factors as substance use, social networks and traumatic events in our understanding of the complex links between mental illness, criminal behaviour and risk factors upon admission and at discharge.

This section also looked at the means by which those with a mental illness who have committed a crime are diverted away from further involvement with the justice system through pre-arrest diversion programs, court diversion and mental health courts. Research shows that participants in mental health diversion programs spend less time in jail and have more involvement with mental health professionals and community mental health services than individuals not involved in such programs.

The section also looked at individuals with a mental illness who are incarcerated in one of Canada's correctional facilities and the programming available to them while in prison and upon release from prison. Persons with a mental illness (including an addiction) are over-represented in prison systems in Canada. Those who are incarcerated have been diagnosed with a range of mental illnesses, including psychotic disorders, major depressive disorders and substance abuse disorders, to name a few. A similar pattern was noted among youth who were incarcerated or in custody. Preliminary evaluations speak to the effectiveness of violence prevention and anger management programs offered in correctional facilities. However, in addition to accessibility issues, there remain many gaps in knowledge about the effectiveness of mental health programming and mental health–related outcome measures among offenders with a mental illness.

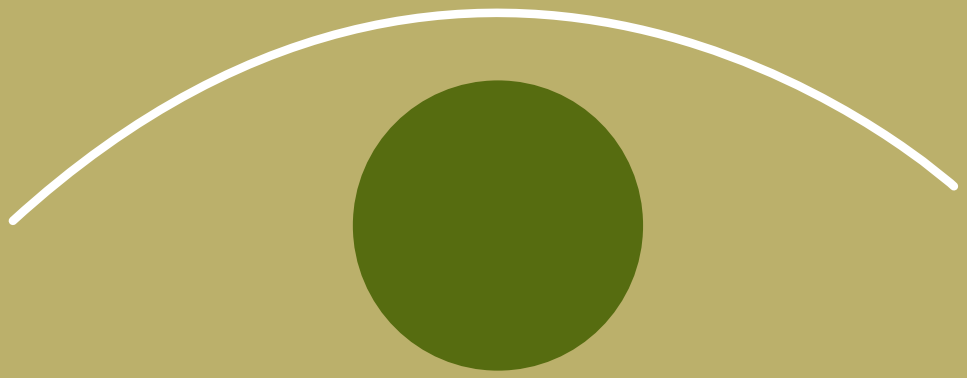
Section Two Key Messages and Information Gaps

What do we know?

- The individual and upstream determinants of mental illness and criminal behaviour are numerous and interrelated.
- Although most people with a mental illness or compromised mental health are not in a correctional facility, inmates are more likely to suffer from certain types of mental illnesses (including substance abuse) than are those in the general population.
- Compared to the general population, suicide attempts are higher among inmates.
- Most information on rates of mental illness among the incarcerated are based on cross-sectional data, thereby limiting the conclusions that can be made about causality.
- There is great diversity within the prison population in terms of age, sex, ethnicity, mental health status, mental illness and use of health services.
- Men and Aboriginal Peoples are over-represented in the prison system.
- Inmates have a higher prevalence of mental illness than the general population.
- There has been a trend towards including more aspects of mental health promotion in programs targeting individuals involved with the criminal justice system.

What do we still need to know?

- For offenders with a mental illness, what is the causal relationship and time trajectory between mental illness and incarceration?
- What proportion of inmates currently in prison, at either the provincial/territorial or federal level, have compromised mental health? A diagnosed mental illness (for example, fetal alcohol spectrum disorder)?
- Is the number of mentally ill people being processed through the criminal justice system increasing?
- To what extent are inmates with a mental disorder accurately identified, assessed and provided with treatment at intake?
- What is the availability of mental health services for inmates within provincial/territorial and federal correctional facilities?
- What is the capacity of correctional facilities to address the needs of inmates presenting with mental illnesses?
- How many offenders with a mental illness are on remand? How many are accurately assessed and receiving treatment while on remand?
- How many offenders with a mental illness receive or do not receive treatment, support and programming?
- What is the effectiveness of various community-based programs at addressing the mental health needs of those released from prison and providing support that prevents repeat offending?
- What processes are effective at linking the custodial and community contexts?
- What is the link between the availability of community-based mental health services, availability of social housing and incarceration of individuals with a mental illness?



Conclusions

The goal of *Mental Health, Delinquency and Criminal Activity* was to explore how mental health, mental illness, delinquency, criminal activity and their various determinants are inter-related.

The first section of the report presents literature and analyses that show that various factors at the individual, family, school/peer and community levels can be risk factors for or protective factors against delinquency or the risk of delinquency. The second section of the report looks at the links between individuals with a mental illness who were or are involved with the criminal justice system. It looked at the following issues: the risk factors related to lack of social support, discharge planning, substance use and life situations faced by those with a criminal history and admitted to a mental health bed; the effectiveness of diversion programs for those with a mental illness who have committed a crime; the prevalence of mental illness among incarcerated adults and youth; and the availability and effectiveness of programming for offenders with a mental illness.

Given the availability of information and efforts to stay within the scope of this report, there were a number of specific areas that we were unable to address, including:

- Mental health and criminal behaviour in the workplace;
- Short- and long-term effects on children whose parents are incarcerated;
- Health impacts on correctional officers who work with mentally ill offenders;
- Mental functioning of inmates diagnosed with a mental illness;
- The role of and impacts on police as first responders to persons with mental illness; and
- The effectiveness of restorative justice approaches in reducing the risk of re-offending, particularly among offenders with a mental illness.

Research shows that while mental health is one of many factors linked to the onset of criminal behaviour, it is not often examined as a health outcome. Other factors linked to criminal behaviour are broader in nature, referring to such factors as income, housing quality and neighbourhood characteristics. Others are more individual in nature and can include mental illness and addictions. There remains a need to understand causal pathways and developmental trajectories associated with mental health, mental illness and delinquency and criminal activity. Understanding the link between these issues requires consideration of both individual-level factors and the broader social determinants of health. With this understanding, there is a greater opportunity for interventions and policies that may be effective at promoting mental health, preventing crime and reducing the risk of repeat offending among those with a mental illness.

There is a role for everyone across all levels of government and sectors, both within and outside of health, to play in understanding the link between mental health, delinquency and crime so as to identify opportunities for prevention and intervention. Findings in this report indicate that no single program that targets only one risk or protective factor would be as effective as programming that targets the multiple factors that are associated with mental health, delinquency and criminal activity. Further, there are various factors at play in preventing delinquency and criminal activity that are evident within the individual, family, school/peer and community contexts. For those involved with the criminal justice system, there is value in providing appropriate services and programs both within correctional facilities and in the community.

What CPHI Research Is Happening in the Area?

CPHI has funded and commissioned a number of research projects and products related to mental health, including those listed below.

CPHI-Funded and Commissioned Research Projects and Programs

- *What Makes a Community Mentally Healthy?* A Collection of Papers
- *How Healthy Are Rural Canadians? An Assessment of Their Health Status and Health Determinants* (Public Health Agency of Canada, Laurentian University)
- Material and Social Inequalities in the Montréal Metropolitan Area: Association With Physical and Mental Health Outcomes (M. Zunzunegui, Université de Montréal)
- Children's Mental Health: Preventing Disorders and Promoting Population Health in Canada (C. Waddell, University of British Columbia)
- The Effects of Special Education Interventions on the Academic and Mental Health Outcomes of Children (K. Bennett, McMaster University)
- Mental and Physical Health of Quebec Adolescents in Youth Centres: A Case-Control Study (J. Toupin, Université de Sherbrooke)
- Vulnerable Youth: A Study of Obesity, Poor Mental Health, and Risky Behaviours Among Adolescents in Canada (D. Willms, University of British Columbia)
- Relations Between Social Support, Mental Health and Quality of Life Components Among the Socio-Economically Disadvantaged (J. Caron, Douglas Hospital Research Centre, Montréal)
- *Women's Health Surveillance Report: A Multidimensional Look at the Health of Canadian Women* (M. Desmeules, Public Health Agency of Canada)
- Immigrants, Selectivity and Mental Health (Z. Wu, University of Victoria)

Other Complementary Products

- *Mental Health, Delinquency and Criminal Activity*—documents that will be available on CPHI's website:
  - Report summary
  - PowerPoint presentation
  - Literature search methodology
  - Data and analysis methodology
  - Policy scanning methodology

For More Information

CPHI's *Improving the Health of Canadians* reports aim to synthesize key research findings on a given theme, present new data analysis on an issue and share evidence on what we know and what we do not know about what works from a policy and program perspective.

Improving the Health of Canadians 2004 (IHC 2004)[11] was CPHI's first flagship report. The report was organized into four key chapters: Income, Early Childhood Development, Aboriginal Peoples' Health and Obesity.

After the release of IHC 2004, a decision was made to produce and disseminate the second report, *Improving the Health of Canadians* 2005–2006 as a report series reflecting CPHI's strategic themes for 2004 to 2007: *healthy transitions to adulthood, healthy weights* and *place and health*.

- The first report in the series, *Improving the Health of Young Canadians* (released in October 2005) explored the association between positive ties with families, schools, peers and communities and the health behaviour and outcomes of Canadian youth aged 12 to 19 years.[33]
- The second report in the series, *Improving the Health of Canadians: Promoting Healthy Weights* (released in February 2006) looked at how features in the environments in which we live, learn, work and play make it easier—or harder—for us as Canadians to make healthier choices about what we eat and how physically active we are.[132]
- The final report in the series, *Improving the Health of Canadians: An Introduction to Health in Urban Places* (released in November 2006) focused on the link between the health of Canadians in urban settings and how various social and physical aspects of urban places influence the daily lives and health of people who live in them.[133]

CPHI's strategic themes for 2007 to 2010 include *mental health and resilience, place and health, reducing gaps in health* and *healthy weights*.[134] The current series of *Improving the Health of Canadians* reports comprises three reports that look at mental health and resilience from a population health approach.

- The first report in the series, *Mental Health and Homelessness* (released in August 2007) looked at the link between mental health, homelessness and both individual- and broad-level social determinants of health.[4]

Improving the Health of Canadians: Mental Health, Delinquency and Criminal Activity is available in both official languages on the CIHI website, at www.cihi.ca/cphi. To order additional copies of the report, please contact:

Canadian Institute for Health Information
Order Desk
495 Richmond Road, Suite 600
Ottawa, ON K2A 4H6
Phone: 613-241-7860
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What you see in the print version of this report is only part of what you can find on our website. Please stop by www.cihi.ca/cphi for additional information and a full list of available CPHI reports, newsletters and other products.

- Download a presentation of the highlights of *Improving the Health of Canadians: Mental Health, Delinquency and Criminal Activity*.
- Sign up to receive updates and information through CPHI's e-newsletter, *Health of the Nation*.
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CPHI Reports Previously Published by CIHI

Name of Report	Author and Publication Date
Mental Health	
• *Improving the Health of Canadians: Mental Health and Homelessness*	CIHI (August 2007)
Place and Health	
• *Improving the Health of Canadians: An Introduction to Health in Urban Places*	CIHI (November 2006)
• *How Healthy Are Rural Canadians? An Assessment of Their Health Status and Health Determinants*	CIHI, Public Health Agency of Canada and Laurentian University (September 2006)
• *Kachimaa Mawiin—Maybe for Sure: Finding a Place for Place in Health Research and Policy*	CIHI (October 2005)
• *Developing a Healthy Community Index: A Collection of Papers*	CIHI (February 2005)
• *Housing and Population Health*	Brent Moloughney (June 2004)
• *Prairie Regional Workshop on the Determinants of Healthy Communities*	CIHI (August 2003)
• *Improving the Health of Canadians: Promoting Healthy Weights*	CIHI (February 2006)
Promoting Healthy Weights	
• *State of the Evidence Review on Urban Health and Healthy Weights*	Kim D. Raine et al. (March 2008)
• *Improving the Health of Canadians: Promoting Healthy Weights*	CIHI (February 2006)
• *Socio-Demographic and Lifestyle Correlates of Obesity—Technical Report on the Secondary Analyses Using the 2000–2001 Canadian Community Health Survey*	Cora Lynn Craig, Christine Cameron and Adrian Bauman (August 2005)
• *Overweight and Obesity in Canada: A Population Health Perspective*	Kim D. Raine (August 2004)
• *Improving the Health of Canadians—Obesity chapter*	CIHI (February 2004)
• *Obesity in Canada—Identifying Policy Priorities*	CIHI and the Canadian Institutes of Health Research (CIHR) (June 2003)

continued

CPHI Reports Previously Published by CIHI

Name of Report	Author and Publication Date
Reducing Gaps in Health	
• *What Have We Learned Studying Income Inequality and Population Health?*	Nancy Ross (December 2004)
• *Improving the Health of Canadians—Income chapter*	CIHI (February 2004)
• *Poverty and Health CPHI Collected Papers*	CIHI, Shelley Phipps and David Ross (September 2003)
Healthy Transitions to Adulthood	
• *From Patches to a Quilt: Piecing Together a Place for Youth*	CIHI (September 2006)
• *Improving the Health of Young Canadians*	CIHI (October 2005)
• *"You say 'to-may-to(e)' and I say 'to-mah-to(e)'": Bridging the Communication Gap Between Researchers and Policy-Makers*	CIHI (September 2004)
• *CPHI Regional Workshop—Atlantic Proceedings (Fredericton)*	CIHI (July 2003)
Early Childhood Development	
• *Early Development in Vancouver: Report of the Community Asset Mapping Project (CAMP)*	Clyde Hertzman et al. (March 2004)
• *Improving the Health of Canadians—Early Childhood Development chapter*	CIHI (February 2004)
Aboriginal Peoples' Health	
• *Improving the Health of Canadians—Aboriginal Peoples' Health chapter*	CIHI (February 2004)
• *Measuring Social Capital: A Guide for First Nations Communities*	Javier Mignone (December 2003)
• *Initial Directions: Proceedings of a Meeting on Aboriginal Peoples' Health*	CIHI (June 2003)
• *Urban Aboriginal Communities: Proceedings of a Roundtable Meeting on the Health of Urban Aboriginal People*	CIHI (March 2003)
• *Broadening the Lens: Proceedings of a Roundtable on Aboriginal Peoples' Health*	CIHI (January 2003)
Cross-Cutting Issues and Tools	
• *Health of the Nation*—e-newsletter	CIHI (quarterly)
• *The Canadian Population Health Initiative Action Plan 2007–2010*	CIHI (December 2006)
• *Moving Population and Public Health Knowledge Into Action*	CIHI and CIHR (February 2006)
• *Select Highlights on Public Views of the Determinants of Health*	CIHI (February 2005)
• *Women's Health Surveillance Report: Supplementary Chapters*	CIHI and Health Canada (October 2004)
• *Charting the Course Progress: Two Years Later: How Are We Doing?*	CIHI and CIHR (February 2004)

continued

CPHI Reports Previously Published by CIHI

Name of Report	Author and Publication Date
Cross-Cutting Issues and Tools *continued*	
• *Women's Health Surveillance Report: A Multidimensional Look at the Health of Canadian Women*	CIHI and Health Canada (October 2003)
• *Barriers to Accessing and Analyzing Health Information in Canada*	George Kephart (November 2002)
• *Tools for Knowledge Exchange: Best Practices for Policy Research*	CIHI (October 2002)
• *Charting the Course: A Pan-Canadian Consultation on Population and Public Health Priorities*	CIHI and CIHR (May 2002)
• *Partnership Meeting Report*	CIHI (March 2002)
• *An Environmental Scan of Research Transfer Strategies*	CIHI (February 2001)

References

1. World Health Organization, *The World Health Report 2001: Mental Health—New Understanding, New Hope* (Geneva: WHO, 2001).

2. World Health Organization, *Mental Health: Strengthening Mental Health Promotion* (Geneva: WHO, 2001).

3. Public Health Agency of Canada, *The Human Face of Mental Health and Mental Illness in Canada 2006* (Ottawa: Minister of Public Works and Government Services Canada, 2006).

4. Canadian Institute for Health Information, *Improving the Health of Canadians: Mental Health and Homelessness* (Ottawa: CIHI, 2007).

5. The Standing Senate Committee on Social Affairs Science and Technology, *Out of the Shadows at Last—Transforming Mental Health, Mental Illness and Addiction Services in Canada* (Ottawa: The Senate, 2006).

6. Office of the Prime Minister, *Mental Health Commission of Canada: Media Backgrounder* (2007), [online], cited October 11, 2007, from <http://pm.gc.ca/eng/media.asp?id=1807>.

7. W. Silver, "Crime Statistics in Canada, 2006," *Juristat* 27, 5 (2007): pp. 1–15, Statistics Canada catalogue no. 85-002-XIE.

8. R. C. Bland et al., "Psychiatric Disorders in the Population and in Prisoners," *International Journal of Law and Psychiatry* 21, 3 (1998): pp. 273–279.

9. J. H. Brink, D. Doherty and A. Boer, "Mental Disorder in Federal Offenders: A Canadian Prevalence Study," *International Journal of Law and Psychiatry* 24, 4-5 (2001): pp. 339–356.

10. M. Shaw, *Investing in Youth: International Approaches to Preventing Crime and Victimization* (Montréal: International Centre for the Prevention of Crime, 2001).

11. Canadian Institute for Health Information, *Improving the Health of Canadians* (Ottawa: CIHI, 2004).

12. K. McLaren, *Youth Development–Literature Review* (Wellington, New Zealand: Ministry of Youth Affairs, 2002).

13. P. J. Carrington, *The Development of Police-Reported Delinquency Among Canadian Youth Born in 1987 and 1990* (Ottawa: Ministry of Industry, 2007), Statistics Canada catalogue no. 85-561-MIE-N.009.

14. J. Latimer et al., *The Correlates of Self-Reported Delinquency: An Analysis of the National Longitudinal Survey of Children and Youth* (Ottawa: Department of Justice Canada, 2003).

15. K. B. Ludwig and J. F. Pittman, "Adolescent Prosocial Values and Self-Efficacy in Relation to Delinquency, Risky Sexual Behavior, and Drug Use," *Youth & Society* 30, 4 (1999): pp. 461–482.

16. G. MacNeil, C. Stewart and A. V. Kaufman, "Social Support as a Potential Moderator of Adolescent Delinquent Behaviors," *Child and Adolescent Social Work Journal* 17, 5 (2000): pp. 361–379.

17. J. B. Sprott, A. N. Doob and J. M. Jenkins, "Problem Behaviour and Delinquency in Children and Youth," *Juristat* 21, 4 (2001): pp. 1–13, Statistics Canada catalogue no. 85-002-XPE.

18. J. Savoie, "Youth Self-Reported Delinquency, Toronto, 2006," *Juristat* 27, 6 (2007): pp. 1–19, Statistics Canada catalogue no. 85-002-XPE.

19. L. M. Babinski, C. S. Hartsough and N. M. Lambert, "Childhood Conduct Problems, Hyperactivity-Impulsivity, and Inattention as Predictors of Adult Criminal Activity," *Journal of Child Psychology and Psychiatry and Allied Disciplines* 40, 3 (1999): pp. 347–355.

20. K. H. Trzesniewski et al., "Low Self-Esteem During Adolescence Predicts Poor Health, Criminal Behavior, and Limited Economic Prospects During Adulthood," *Developmental Psychology* 42, 2 (2006): pp. 381–390.

21. L. R. McKnight and A. B. Loper, "The Effect of Risk and Resilience Factors on the Prediction of Delinquency in Adolescent Girls," *School of Psychology International* 23, 2 (2002): pp. 186–198.

22. J. M. MacDonald et al., "The Relationship Between Life Satisfaction, Risk-Taking Behaviours, and Youth Violence," *Journal of Interpersonal Violence* 20, 11 (2005): pp. 1495–1518.

23. D. P. Farrington et al., "Are Within-Individual Causes of Delinquency the Same as Between-Individual Causes?," *Criminal Behaviour and Mental Health* 12 (2002): pp. 53–68.

24. E. M. Thomas, *Aggressive Behaviour Outcomes for Young Children: Change in Parenting Environment Predicts Change in Behaviour* (Ottawa: Minister of Industry, 2004), Statistics Canada catalogue no. 89-599-MIE.

25. U. Gatti et al., "Youth Gangs, Delinquency and Drug Use: A Test of the Selection, Facilitation, and Enhancement Hypotheses," *Journal of Child Psychology and Psychiatry* 46, 11 (2005): pp. 1178–1190.

26. K. G. Hill et al., "Childhood Risk Factors for Adolescent Gang Membership: Results From the Seattle Social Development Project," *Journal of Research in Crime and Delinquency* 36, 3 (1999): pp. 300–322.

27. T. P. Ulzen and H. Hamilton, "The Nature and Characteristics of Psychiatric Comorbidity in Incarcerated Adolescents," *Canadian Journal of Psychiatry* 43, 1 (1998): pp. 57–63.

28. The McCreary Centre Society, *Time Out II: A Profile of BC Youth in Custody* (Vancouver: McCreary Centre Society, 2005).

29. M. D. Stout and G. Kipling, *Aboriginal People, Resilience and the Residential School Legacy* (Ottawa: Aboriginal Healing Foundation, 2003).

30. J. D. Hawkins, R. F. Catalano and J. Y. Miller, "Risk and Protective Factors for Alcohol and Other Drug Problems in Adolescence and Early Adulthood: Implications for Substance Abuse Prevention," *Psychological Bulletin* 112, 1 (1992): pp. 64–105.

31. T. I. Herrenkohl et al., "Developmental Trajectories of Family Management and Risk for Violent Behavior in Adolescence," *Journal of Adolescent Health* 39, 2 (2006): pp. 206–213.

32. M. D. Resnick, M. Ireland and I. Borowsky, "Youth Violence Perpetration: What Protects? What Predicts? Findings From the National Longitudinal Study of Adolescent Health," *Journal of Adolescent Health* 35 (2004): pp. e1–e10.

33. Canadian Institute for Health Information, *Improving the Health of Young Canadians* (Ottawa: CIHI, 2005).

34. R. Crosnoe, K. G. Erickson and S. M. Dornbusch, "Protective Functions of Family Relationships and School Factors on the Deviant Behavior of Adolescent Boys and Girls," *Youth & Society* 33, 4 (2002): pp. 515–544.

35. V. Battistich and A. Hom, "The Relationship Between Students' Sense of Their School as a Community and Their Involvement in Problem Behaviors," *American Journal of Public Health* 87, 12 (1997): pp. 1997–2001.

36. J. A. Stein, R. L. Dukes and J. I. Warren, "Adolescent Male Bullies, Victims, and Bully-Victims: A Comparison of Psychosocial and Behavioral Characteristics," *Journal of Pediatric Psychology* 32, 3 (2007): pp. 273–282.

37. R. L. Dukes and J. A. Stein, "Gender and Gang Membership: A Contrast of Rural and Urban Youth on Attitudes and Behavior," *Youth & Society* 34, 4 (2003): pp. 415–440.

38. H. B. Kaplan and C.-H. Lin, "Deviant Identity, Negative Self-Feelings, and Decreases in Deviant Behavior: The Moderating Influence of Conventional Social Bonding," *Psychology, Crime & Law* 11, 3 (2005): pp. 289–303.

39. L. Shumow, D. L. Vandell and J. Posner, "Perceptions of Danger: A Psychological Mediator of Neighborhood Demographic Characteristics," *American Journal of Orthopsychiatry* 68, 3 (1998): pp. 468–478.

40. J. M. Bolland, "Hopelessness and Risk Behaviour Among Adolescents Living in High-Poverty Inner-City Neighbourhoods," *Journal of Adolescence* 26 (2003): pp. 145–158.

41. F. Robinson and J. Keithley, "The Impacts of Crime on Health and Health Services: A Literature Review," *Health, Risk & Society* 2, 3 (2000): pp. 253–266.

42. K. AuCoin and D. Beauchamp, *Impacts and Consequences of Victimization*, GSS 2004 (Ottawa: Minister of Industry, 2007), [online], from <http://www.statcan.ca/english/freepub/85-002-XIE/85-002-XIE2007001.pdf>.

43. Mental Health Commission of Canada, *Advisory Committee Chairs,* [online], cited October 10, 2007, from <http://www.mentalhealthcommission.ca/boardadvisory.html>.

44. Public Safety Canada, *National Crime Prevention Centre* (2007), [online], cited July 10, 2007, from <http://www.publicsafety.gc.ca/prg/cp/ncpc_about-en.asp>.

45. Public Safety Canada, *A Blueprint for Effective Crime Prevention* (2007), [online], cited August 2007, from <http://www.publicsafety.gc.ca/prg/cp/_fl/bp-en.pdf>.

46. National Crime Prevention Centre, *Policy Framework for Addressing Crime Prevention and Children Ages 12 to 18* (Ottawa: Government of Canada, 2000), [online], cited July 11, 2007, from <http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/19/c9/26.pdf>.

47. National Crime Prevention Council, *Evaluation Document, Review of the National Crime Prevention Council Interim Report, Programme Evaluation Section* (Ottawa: Government of Canada, 1997), [online], cited July 11, 2007, from <http://www.justice.gc.ca/en/ps/eval/reports/97/ncpc/ncpc.pdf>.

48. National Crime Prevention Centre, *Policy Framework for Addressing Crime Prevention and Children Ages 0 to 12* (Ottawa: Government of Canada, 2000), [online], cited July 11, 2007, from <http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/19/c9/23.pdf>.

49. J. D. Hawkins et al., "Promoting Positive Adult Functioning Through Social Development Intervention in Childhood," *Archive of Pediatrics & Adolescent Medicine* 159 (2005): pp. 25–31.

50. World Health Organization and Universities of Nijmegen and Maastricht, *Prevention of Mental Disorders: Effective Interventions and Policy Options: Summary Report* (Geneva: WHO, 2004).

51. A. Williams, *Literature Review for 0-11: Early Intervention Project* (Tasmania Department of Health and Human Services, 2001), [online], cited June 2001, from <http://www.dhhs.tas.gov.au/agency/pro/ourkids/documents/Lit%20Review%20%20The%20Needs%20of%20Children%200-11.doc>.

52. National Crime Prevention Centre, *Evaluation of Project Early Intervention* (Ottawa: National Crime Prevention Centre, 2003).

53. Public Safety Canada, "Banyan Community Services Snap™ Under 12 Outreach Project," *National Crime Prevention Centre*, 2007, [online], cited October 11, 2007, from <http://www.publicsafety.gc.ca/prg/cp/bldngevd/_fl/2007-ES-1_e.pdf>.

54. A. Sterling Honig, *Syracuse Family Development Research Program* (Syracuse, N.Y.: 2007), [online], from <http://guide.helpingamericasyouth.gov/programdetail.cfm?id=432>.

55. P. Begin, *Delinquency Prevention: The Montreal Longitudinal-Experimental Study* (Government of Canada Depository Services Program, 1995), [online], from <http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/MR/mr132-e.htm>.

56. R. Boisjoli et al., "Impact and Clinical Significance of a Preventive Intervention for Disruptive Boys: 15-Year Follow-Up," *British Journal of Psychiatry* 191 (2007): pp. 415–419.

57. Public Safety Canada, *Strong Families, Strong Children Project* (Ottawa: Public Safety Canada, 2007).

58. Centre for the Study and Prevention of Violence, *Blueprints for Violence Prevention: Bullying Prevention Program Executive Summary Highlights* (2004), [online], cited October 11, 2007, from <http://www.colorado.edu/cspv/safeschools/bullying/bullying_bppsummary.html>.

59. Canadian Institute for Health Information, *Ontario Mental Health Reporting System (OMHRS): Minimum Data Set User's Manual* (Ottawa: CIHI, 2007).

60. P. Sealy and P. C. Whitehead, "Forty Years of Deinstitutionalization of Psychiatric Services in Canada: An Empirical Assessment," *Canadian Journal of Psychiatry* 49, 4 (2004): pp. 249–257.

61. D. K. Hartford et al., *Evidence-Based Practices in Diversion Programs for Persons With Serious Mental Illness Who Are in Conflict With the Law: Literature Review and Synthesis* (Ontario: Ontario Mental Health Foundation, 2004), [online], cited August 3, 2007, from <http://www.cacp.ca/english/download.asp?id=642>.

62. R. D. Schneider, H. Bloom and M. Heerema, *Mental Health Courts Decriminalizing the Mentally Ill* (Toronto: Irwin Law, 2007).

63. H. J. Steadman, S. M. Morris and D. L. Dennis, "The Diversion of Mentally Ill Persons From Jails to Community-Based Services: A Profile of Programs," *American Journal of Public Health* 85 (1995): pp. 1630–1635.

64. City of Vancouver, Car 87—Mental Health Car (2007), [online], last modified May 29, 2007, cited December 12, 2007, from <http://www.city.vancouver.bc.ca/police/OpsSupp/youth/car87.htm>.

65. H. Kent, "News @ a Glance," *Journal of Ayub Medical College* 4 (2005): p. 172.

66. Crisis Outreach and Support Team (COAST), *Coast: Crisis Outreach and Support Team* (2007), [online], cited December 12, 2007, from <http://www.coasthamilton.ca/coastad_eng.htm>.

67. Capital Health, *Mental Health Mobile Crisis Team* (2007), [online], cited December 12, 2007, from <http://www.cdha.nshealth.ca/default.aspx?Page=75&category.Categories.1=104&centerContent.Id.0=5278>.

68. L. Simpson, L. Gardner and C. Mitton, *Calgary Diversion Project, Final Evaluation Report* (Calgary: Alberta Health and Wellness, 2004).

69. R. S. Swaminath et al., "Experiments in Change: Pretrial Diversion of Offenders With Mental Illness," *Canadian Journal of Psychiatry* 47, 5 (2002): pp. 450–458.

70. Department of Justice Canada, *The Youth Criminal Justice Act: Summary and Background* (Ottawa: Department of Justice Canada, 2006), [online], last modified January 31, 2006, cited November 8, 2007, from <http://www.justice.gc.ca/en/ps/yj/ycja/explan.html>.

71. Department of Justice Canada, *YCJA Explained: Overview* (Ottawa: Department of Justice Canada, 2002), [online], cited November 8, 2007, from <http://www.justice.gc.ca/en/ps/yj/repository/downlds/2010001.pdf>.

72. Ontario Courts, *Mental Health Court Toronto, Old City Hall* (2007), [online], cited August 3, 2007, from <http://www.ontariocourts.on.ca/ontario_court_justice/mentalhealth/index.htm>.

73. D. C. Walker, Judge, ed. *Provincial Judges' Journal* 29, 1 (2006).

74. Saint John Mental Health Court, *2006 Annual Report—Moving Ahead* (Saint John, N.B.: 2006).

75. V. Joshi and A. Brien, "Long Term Outcome of Patients Participating in Mental Health Court in Saint John, New Brunswick, Canada," presented at the XXIXth International Congress on Law and Mental Health, Paris, France, on July 4, 2005.

76. H. J. Steadman and M. Naples, "Assessing the Effectiveness of Jail Diversion Programs for Persons With Serious Mental Illness and Co-Occurring Substance Use Disorders," *Behavioral Sciences and the Law* 23 (2005): pp. 163–170.

77. D. Macfarlane et al., "Mental Health Services in the Courts: A Program Review," *Health Law in Canada* 25 (2004): pp. 21–28.

78. J. Latimer and A. Lawrence, *The Review Board Systems in Canada: An Overview of Results From the Mentally Disordered Accused Data Collection Study* (Ottawa: Department of Justice Canada, 2006).

79. H. R. Lamb and L. E. Weinberger, "Persons With Severe Mental Illness in Jails and Prisons: A Review," *Psychiatric Services* 49, 4 (1998): pp. 483–492.

80. B. Moloughney, "A Health Care Needs Assessment of Federal Inmates in Canada," *Canadian Journal of Public Health* 95, Suppl 1, March/April 2004: pp. S1–S63.

81. D. E. McNiel, R. L. Binder and J. C. Robinson, "Incarceration Associated With Homelessness, Mental Disorder, and Co-Occurring Substance Abuse," *Psychiatric Services* 56, 7 (2005): pp. 840–846.

82. The John Howard Society, *The Missing Link: Discharge Planning, Incarceration and Homelessness* (Toronto: The John Howard Society, 2006).

83. E. Walsh, A. Buchanan and T. Fahy, "Violence and Schizophrenia: Examining the Evidence," *British Journal of Psychiatry* 180 (2002): pp. 490–495.

84. H. A. Kitchin, "Needing Treatment: A Snapshot of Provincially Incarcerated Adult Offenders in Nova Scotia With a View Towards Substance Abuse and Population Health," *Canadian Journal of Criminology and Criminal Justice* 47, 3 (2005): pp. 501–525.

85. S. Fazel and J. Danesh, "Serious Mental Disorder in 23000 Prisoners: A Systematic Review of 62 Surveys," *Lancet* 359, 9306 (2002): pp. 545–550.

86. Canadian Mental Health Association, *Post Traumatic Stress Disorder*, [online], cited December 12, 2007, from <http://www.cmha.ca/bins/print_page.asp?cid=3-94-97&lang=1>.

87. P. A. May and J. P. Gossage, "Estimating the Prevalence of Fetal Alcohol Syndrome. A Summary," *Journal of the National Institute on Alcohol Abuse and Alcoholism* 25, 3 (2001): pp. 159–167.

88. L. Burd et al., "Fetal Alcohol Syndrome in the Canadian Corrections System," *Journal of FAS International* 1 (2003): pp. 1–10.

89. A. E. Chudley et al., "Fetal Alcohol Spectrum Disorder: Canadian Guidelines for Diagnosis," *Canadian Medical Association Journal* 172, 5 Suppl (2005): pp. S1–S21.

90. A. M. Abrantes, N. G. Hoffmann and R. Anton, "Prevalence of Co-Occurring Disorders Among Juveniles Committed to Detention Centers," *International Journal of Offender Therapy and Comparative Criminology* 49, 2 (2005): pp. 179–193.

91. L. Scahill and M. Schwab-Stone, "Epidemiology of ADHD in School-Age Children," *Child and Adolescent Psychiatric Clinics of North America* 9, 3 (2000): pp. 541–555.

92. S. Trevethan, J.-P. Moore and C. J. Rastin, "A Profile of Aboriginal Offenders in Federal Facilities and Serving Time in the Community," *FORUM on Corrections Research* 14, 3 (2002): pp. 1–6.

93. Statistics Canada, *Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census* (Ottawa: Minister for Statistics Canada, 2008), Statistics Canada catalogue no. 97-558-XIE.

94. Correctional Service of Canada, *Aboriginal Offender Survey: Case Files & Interview Sample* (Ottawa: Correctional Service of Canada, 1997).

95. R. Vermeiren, I. Jespers and T. Moffitt, "Mental Health Problems in Juvenile Justice Populations," *Child and Adolescent Psychiatric Clinics of North America* 15, 2 (2006): pp. 333–351.

96. Solicitor General of Canada, *Sentence Calculation: How Does It Work?* (2007), [online], cited August 8, 2007, from <http://ww2.ps-sp.gc.ca/publications/corrections/pdf/sentence_calcbook_how_e.pdf>.

97. Statistics Canada, *Adult Correctional Services in Canada*, 2004/2005 (Ottawa: Statistics Canada, 2006), Statistics Canada catalogue no. 85-002-XIE.

98. Public Safety Canada, *Federal and Provincial Responsibilities* (2007), [online], cited August 7, 2007, from <http://publicsafety.gc.ca/prg/cor/acc/ifpr-en.asp>.

99. *Bill C-44.6: Corrections and Conditional Release Act* (1992, c.20 reading, June 18th, 1992; C-44.6 legislature) (Ottawa: Federal Government, 1992), [online], cited November 7, 2007, from <http://laws.justice.gc.ca/en/ShowFullDoc/cs/C-44.6///en>.

100. Public Safety Canada, *Sentence Calculation: A Handbook for Judges, Lawyers and Correctional Officials* (Ottawa: Public Works and Government Services Canada, 2005), [online], cited October 30, 2007, from <http://ww2.ps-sp.gc.ca/publications/Corrections/sent_calc_handbook/index_e.asp>.

101. British Columbia Ministry of Public Safety and Solicitor General, *The Strategic Plan of B.C. Corrections* (Victoria: Government of British Columbia, 2006).

102. Assemblée nationale Québec, *Compassion Equity Impartiality Respect* (Québec: Government of Quebec, 2007).

103. Nunavut Department of Justice, *Corrections* (2007), [online], cited August 8, 2007, from <http://www.justice.gov.nu.ca/english/corrections.html>.

104. Government of Alberta, *Aboriginal Justice Programs and Initiatives* (Alberta: Justice and Attorney General of Alberta, 2006).

105. Ministry of Public Safety and Solicitor General, *Correctional Facilities in British Columbia* (2004), [online], last modified October 28, 2004, cited November 7, 2007, from <http://www.pssg.gov.bc.ca/corrections/in-bc/details/overview.htm>.

106. Government of Saskatchewan, *Adult Correctional Facilities* (2007), [online], cited November 7, 2007, from <www.cps.gov.sk.ca/Adult-Correctional-Facilities>.

107. Government of Ontario, *Adult Offenders—Treatment Programs* (2004), [online], last modified April 19, 2004, cited November 8, 2007, from <www.mcscs.jus.gov.on.ca/english/corr_serv/adult_off/treat_prog.html>.

108. Correctional Service of Canada, *Women Offender Programs and Issues, Federally Sentenced Women on Conditional Release: A Survey of Community Supervisors* (Correctional Service of Canada, 2007), [online], cited January 29, 2008, from <http://www.csc-scc.gc.ca/text/prgrm/fsw/fsw29/fsw29e05-eng.shtml>.

109. Government of New Brunswick, *Directory: Community and Correctional Services (Division)* (2005), [online], cited November 7, 2007, from <http://app.infoaa.7700.gnb.ca/gnb/pub/DetailOrgEng1.asp?OrgID1=2551&Keyword1=&DeptID1=78>.

110. Government of Nova Scotia, *Offender Programs* (2007), [online], cited November 7, 2007, from <www.gov.ns.ca/just/Divisions/Corrections/OffenderPrograms.asp>.

111. M. A. Jablonski, T. Lukaszuk and R. Danyluk, *Government MLA Review of Correctional Services: The Changing Landscape of Corrections* (Edmonton: Legislative Assembly of Alberta, 2002), [online], from <http://www.solgen.gov.ab.ca/downloads/documentloader.aspx?id=45376>.

112. Yukon Government, *Sexual Offender Risk Management Program* (2004), [online], last modified November 7, 2004, cited November 7, 2007, from <www.justice.gov.yk.ca/prog/cor/vs/programs.html>.

113. Government of Prince Edward Island, *Attorney General: Community and Correctional Services*, [online], cited November 7, 2004, from <www.gov.pe.ca/oag/cacs-info/index.php3>.

114. John Howard Society of Newfoundland and Labrador Inc., *Learning Resources Program* [online], cited January 30, 2008, from <http://www.johnhowardnl.ca/lrp/lrp.html>.

115. John Howard Society of Ontario, *Remand in Ontario: A Backgrounder* (Toronto: John Howard Society of Ontario, 2005).

116. Statistics Canada, "Adult and Youth Correctional Services: Key Indicators," *The Daily*, November 21, 2007: pp. 1–6.

117. Correctional Service of Canada, *Correctional Service Canada 2007–2008 Estimates, Part III Report on Plans and Priorities* (Ottawa: Correctional Service of Canada, 2007), [online], cited August 7, 2007, from <http://www.tbs-sct.gc.ca/rpp/0708/csc-scc/csc-scc_e.pdf>.

118. Correctional Service of Canada, *Living Skills Program* (2007), [online], cited August 7, 2007, from <http://www.csc-scc.gc.ca/text/prgrm/correctional/living_skills_program_e.shtml>.

119. D. Robinson, *The Impact of Cognitive Skills Training on Post-Release Recidivism Among Canadian Federal Offenders* (Ottawa: Correctional Service of Canada, 1995).

120. C. Dowden, K. Blanchette and R. Serin, *Anger Management Programming for Federal Male Inmates: An Effective Intervention* (Ottawa: Correctional Service of Canada, 1999).

121. C. Dowden and R. Serin, *Anger Management Programming for Offenders: The Impact of Program Performance Measures* (Ottawa: Correctional Service of Canada, 2001).

122. Correctional Service of Canada, *Violence Prevention Programs* (2007), [online], cited August 7, 2007, from <http://www.csc-scc.gc.ca/text/prgrm/correctional/vp_e.shtml>.

123. F. Cortoni, K. Nunes and M. Latendresse, *An Examination of the Effectiveness of the Violence Prevention Program* (Ottawa: Correctional Service of Canada, 2006).

124. B. A. Grant, D. D. Varis and D. Lefebvre, *Intensive Support Units (ISU) for Federal Offenders With Substance Abuse Problems: An Impact Analysis* (Ottawa: Correctional Service Canada, 2005).

125. A. Sly and K. Taylor, *Preliminary Evaluation of Dialectical Behavior Therapy Within a Women's Structured Living Environment* (Ottawa: Research Branch, Correctional Service of Canada, 2003), [online], cited August 7, 2007, from <http://www.csc-scc.gc.ca/text/rsrch/reports/r145/r145_e.pdf>.

126. A. Sly and K. Taylor, *Evaluation of Psychosocial Rehabilitation Within the Women's Structured Living Environments* (Ottawa: Correctional Service Canada, 2005).

127. Office of the Correctional Investigator, *Annual Report of the Office of the Correctional Investigator 2006–2007* (Ottawa: Minister of Public Works and Government Services Canada, 2007).

128. Public Safety Canada, *Correctional Service Canada Review Panel* (2007), [online], cited October 30, 2007, from <http://www.securitepublique.gc.ca/media/nr/2007/nr20040420-1-eng.aspx>.

129. Correctional Service of Canada, *Commissioner's Directive 840, Health Services* (Ottawa: Commissioner of the Correctional Service of Canada, 2007), [online], cited October 15, 2007, from <http://www.csc-scc.gc.ca/text/plcy/doc/840-cd.pdf>.

130. F. Bouchard, "A Continuum of Care: CSC Launches a Comprehensive Mental Health Strategy," *Let's Talk* 32, 1 (2007): pp. 4–5.

131. S. Hodgins et al., "A Multisite Study of Community Treatment Programs for Mentally Ill Offenders With Major Mental Disorders: Design, Measures, and the Forensic Sample," *Criminal Justice and Behavior* 34 (2007): pp. 211–228.

132. Canadian Institute for Health Information, *Improving the Health of Canadians: Promoting Healthy Weights* (Ottawa: CIHI, 2006).

133. Canadian Institute for Health Information, *Improving the Health of Canadians: An Introduction to Health in Urban Places* (Ottawa: CIHI, 2006).

134. Canadian Institute for Health Information, *The Canadian Population Health Initiative Action Plan 2007–2010* (Ottawa: CIHI, 2006).

It's Your Turn

We welcome comments and suggestions on *Improving the Health of Canadians: Mental Health, Delinquency and Criminal Activity* and on how to make future reports more useful and informative. Please email ideas to cphi@cihi.ca or complete this questionnaire and mail or fax it to:

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Instructions

For each question, please put an "X" beside the most appropriate response. There are no right or wrong answers—we are simply interested in your opinions. Our goal is to improve future reports. Individual responses will be kept confidential.

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Clarity	❑ Excellent	❑ Good	❑ Fair	❑ Poor
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7. How would you improve this report? Do you have any suggestions for future reports?

_____

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Reader Information

8. Where do you live?

- ❑ Newfoundland and Labrador
- ❑ Nova Scotia
- ❑ New Brunswick
- ❑ Prince Edward Island
- ❑ Quebec
- ❑ Ontario
- ❑ Manitoba
- ❑ Saskatchewan
- ❑ Alberta
- ❑ British Columbia
- ❑ Northwest Territories
- ❑ Yukon Territory
- ❑ Nunavut
- ❑ Outside Canada (please specify country)_____

9. What is your main position or role?

- ❑ Health manager or administrator
- ❑ Researcher
- ❑ Policy analyst
- ❑ Board member
- ❑ Elected official
- ❑ Health provider
- ❑ Student/youth
- ❑ Educator
- ❑ Mental health provider
- ❑ Other, please specify_____

Thank you for completing and returning this questionnaire.

This publication is part of CPHI's ongoing inquiry into the patterns of health across this country. Consistent with our broader findings, it reflects the extent to which the health of Canadians is socially determined, interconnected, complex and changing. CPHI is committed to deepening our understanding of these patterns.

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