

"We must cherish children fully for who they are today, recognizing their entitlements and acknowledging the future to be theirs rather than ours. Today's adults, our policies, personal practices and attitudes must reflect this. Children, especially young children, learn primarily by example, particularly that set by adults.

- Dr. Graham Chance

Canadian Institute of Child Health



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A C I C H P R O F I L E

The Health of Canada's Children



A Pocket Guide



CANADIAN INSTITUTE OF CHILD HEALTH

The Health of Canada's Children

A P o c k e t G u i d e

Acknowledgements

The Canadian Institute of Child Health would like to recognize the contributions of all the staff who assisted with the development of this pocket guide. In particular, we would like to thank Jill McMillan, who selected and arranged the content taken from *The Health of Canada's Children: A CICH Profile, 3rd Edition*, and to Sylvie Lalonde, for desktop publishing.

This pocket guide is based on
The Health of Canada's Children: A CICH Profile, 3rd Edition.

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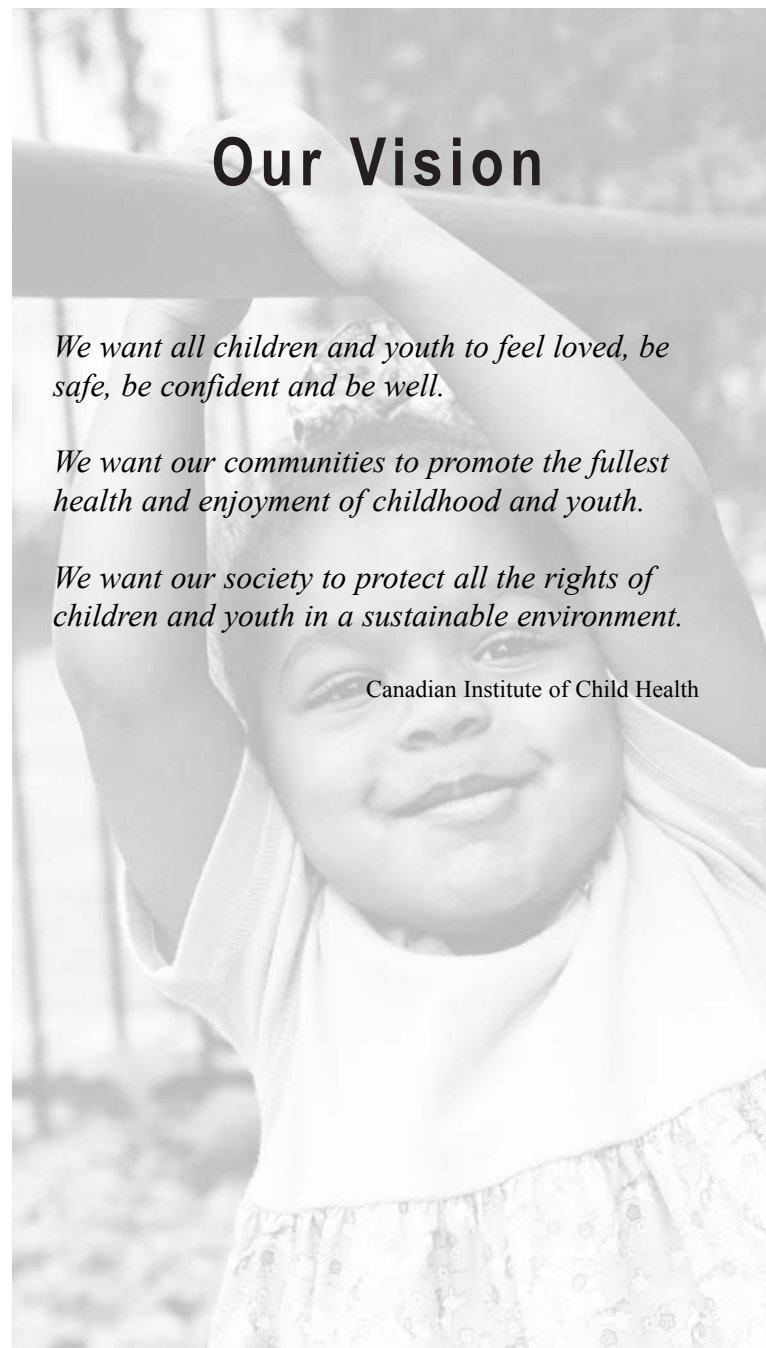
Our Vision

We want all children and youth to feel loved, be safe, be confident and be well.

We want our communities to promote the fullest health and enjoyment of childhood and youth.

We want our society to protect all the rights of children and youth in a sustainable environment.

Canadian Institute of Child Health



Introduction

The Health of Canada's Children: A Pocket Guide is meant to act as a companion piece to *The Health of Canada's Children: A CICH Profile, 3rd Ed.*

The aim of this booklet is to give a brief overview of some of the main issues surrounding Canada's children and youth. It is composed of a number of graphs and charts, which illustrate different trends to create a picture of children's health in Canada today while commentary from several experts help to place the data into context.

Vision Statement

Our Aboriginal children and youth are Sacred Gifts and our hope for the future.

All Aboriginal children see, hear, feel, smell, taste and sense the world of yesterday, today and tomorrow.

Our children continue the Circle of Life when they enter the Eastern Door. With this lies the responsibility to continue along the circle into youthhood, adulthood and becoming Elders. It is up to us as parents to guide them along this path to ensure and secure the future generations. Healthy babies grow up to become healthy youth, adults and Elders.

Our children are innocent. They give us unconditional love, teachings and strength no matter where and in what conditions they live. They are the future parents of those as yet unborn. Also, they are our future leaders, cultural carriers, spiritual Elders and hope as we enter into a new millennium.

These are important responsibilities for our children and youth. In order for them to carry us into the next generation, it is our responsibility to give them unconditional love, respect, honour, nurturing support, strength and cultural identity, with us as parents guiding them. How we act today will affect the Seventh Generation that lies ahead.

With this, our communities will be reunited and strengthened, on the path to healing. Survival of our Nations depends on our children and youth.

*Prepared by Ms. Ginette Thivierge,
based on Round Table discussions.*

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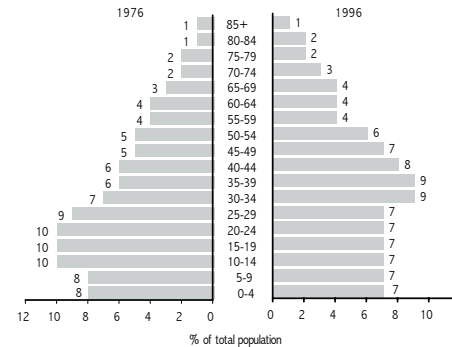
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Population

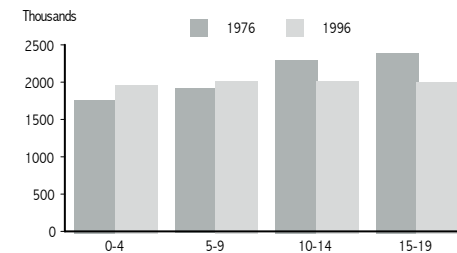
Population Age Distribution
Canada, 1976 and 1996



Source: Statistics Canada. 1998. *Canada Year Book, 1999.*

Despite the baby boom “bulge” evident in the population, children and youth continue to represent a sizable proportion of the overall population. Measuring and monitoring the health and well-being of these young people remain crucial first steps to creating public policies and programs that meet their needs.

Number of Children and Youth, by Age Group
Canada, 1976 and 1996



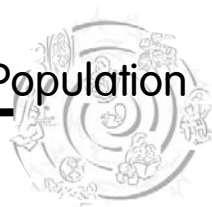
	0-4	5-9	10-14	15-19
1976	1,764.1	1,913.9	2,294.3	2,394.9
1996	1,960.9	2,015.8	2,019.6	2,002.9

In Thousands

Source: Statistics Canada. 1998. *Canada Year Book, 1999.*

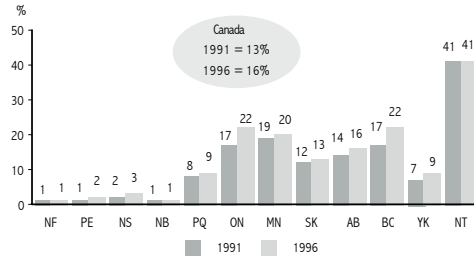
Although children birth-9 years of age accounted for a smaller proportion of the population in 1996 than in 1976, their absolute numbers increased by an estimated 298 700. Children 10-19 years of age accounted for a smaller proportion of the population in 1996 than in 1976 and their absolute numbers declined by approximately 666 700.

Population



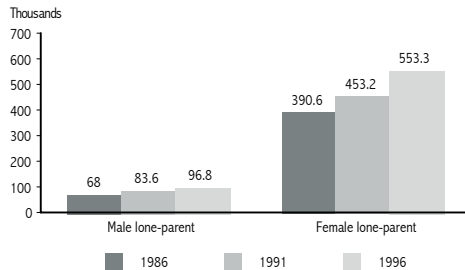
The proportion of people using a non-official language at home is reflective of immigration patterns and the growing diversity among people living in Canada. Meeting the needs of children from diverse linguistic backgrounds is an important challenge for all support systems.

Population Using Non-official Language
Canada, Provinces and Territories, 1991 and 1996



Note: Excludes 1991 and 1996 Census data for one or more incompletely enumerated Indian Reserves or Indian Settlements.
Source: Hanvey, L. et al 1994. *The Health of Canada's Children: A CICH Profile, 2nd Edition*.
CICH using Statistics Canada. 1998. *The Nation Series, Complete Edition*. 1996 Census.

Number of Lone-parent* Families, by Parent's Gender
Canada, 1986, 1991 and 1996



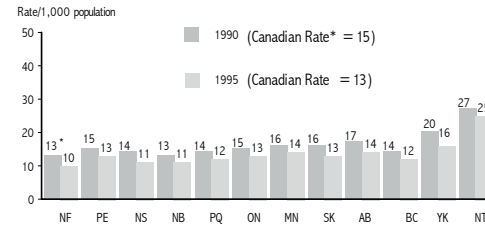
* Lone-parent refers to a mother or a father, with no spouse or common-law partner present, living in a dwelling with one or more never-married sons and/or daughters.
Source: Statistics Canada. 1992. *Families: Number, Type and Structure*. 1991 Census of Canada.
Statistics Canada. 1998. *The Nation Series, Complete Edition*. 1996 Census.

Female lone-parents consistently outnumber male lone-parents more than five to one. Female lone-parents experience a higher rate of poverty than male lone-parents.

Fertility & Birth



Crude Birth Rate
Canada, Provinces and Territories, 1990 and 1995

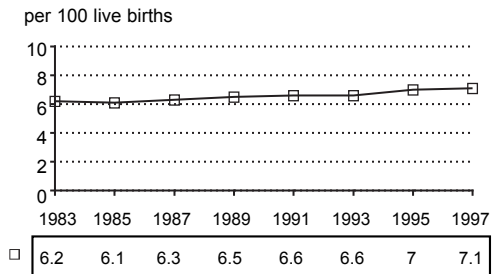


*Figures adjusted due to undercounts.
Source: Statistics Canada. 1997. *Births and Deaths, 1995*.

The crude birth rate, defined as live births per 1000 population, for Canada, has decreased from 15 to 13 per 1000 population between 1990 and 1995.

Early preterm birth is especially associated with perinatal illness, neonatal death and long-term complications, including disability. Some factors thought to be related to the recent increase include higher numbers of multiple births from reproductive technologies and medically induced preterm birth for pregnancy complications.

Preterm Birth Rate
Canada*, 1983-1997

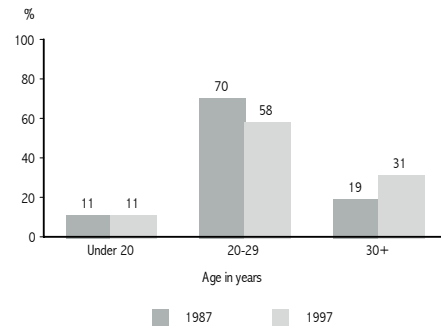


* Excluding Ontario and Newfoundland.
Source: Statistics Canada. *Canadian Vital Statistics System, 1981-1997*.



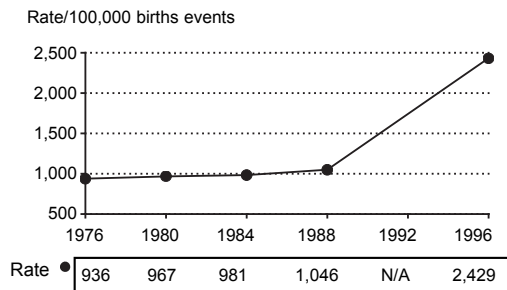
More women are having their first child after the age of thirty. For most perinatal complications, there is no significant age effect. However, the risk of having a cesarean birth, a preterm birth or an infant born with chromosomal anomalies is somewhat elevated for older primiparous women.

First Live Births, by Mother's Age Group*
Canada, 1987 and 1997



* Mother's age was not available for births in Newfoundland prior to 1991.
Note: Excludes births and stillbirths to non-residents of Canada.
Source: Statistics Canada. 1999. *The Daily*. Wednesday June 16, 1999.

Multiple Birth Rate per 100,000 Birth Events
Canada*, 1976-1996



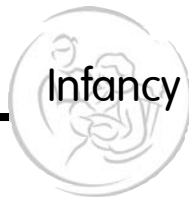
* Newfoundland is excluded in 1978, 1984, and 1990.
Source: Millar, W. et al. (Statistics Canada). 1992. Multiple Births: Trends and Patterns in Canada, 1974-1990. *Health Reports*. Vol.4 No. 3. Cited in Hanvey, L. et al 1994. *The Health of Canada's Children: A CICH Profile, 2nd Edition*. Statistics Canada. 1999. *Births and Deaths, 1996*. Shelf Tables.

The dramatic increase in multiple births is associated with the use of new reproductive technologies, such as fertility drugs. These technologies are more commonly used with increased maternal age. Multiples are more likely to be born preterm.



“Health issues associated with multiple births... and the not yet fully understood implications of reproductive technology, must be measured against the advantages of reproductive technology.”

Ms. A. Schulman



Infancy

Those factors that contribute to healthy childhood development may also be key components in the promotion of resilience in children.

Early Brain Development

- Early brain development is interactive, rapid and dramatic.
- The quality of sensory stimulation (through nurturing and care) and nutrition affect early brain development, influencing learning, behaviour and health throughout the life cycle.
- Some critical or sensitive periods of brain development occur during the first years of life.
- Environments that provide positive stimulation and nutrition during the early years foster optimal physical, emotional, social and intellectual development.
- An environment of neglect and/or abuse during the early years contributes to later learning, behavioural, emotional and physical health problems.
- Adult- and child-oriented initiatives that include nutrition, parenting/caregiver support and opportunities for play with other children are the most effective in enhancing early child development outcomes.

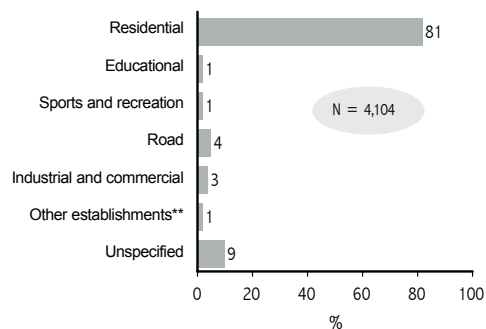
Source: McCain et al. 1999. *Reversing the Real Brain Drain: Early Years Study, Final Report.*



Infancy

Injuries by Location, Children Less Than 1 Year of Age

Canada*, 1997



* Cases reported by 15 Canadian hospitals of which 10 are paediatric, participating in CHIRPP.

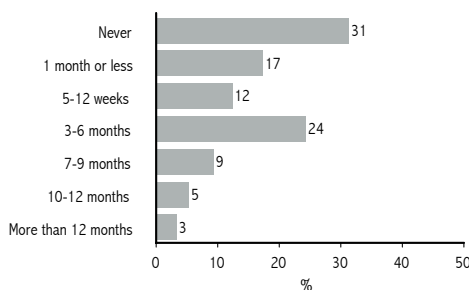
** Includes hospital.

Source: Special runs for CICH conducted by Health Canada, Bureau of Reproductive and Child Health.

Infants are more likely to experience injury in the home environment. Safety measures to prevent injuries in the home are an important public health issue. These measures include age-appropriate supervision and modifications to the home environment (for example, using baby gates on stairs).

Breastfeeding* Duration**

Canada, 1996



*This does not include those who were breastfeeding at the time of the interview.

**Of children from birth to age 1 year at the time of the NLSCY interview.

Source: McIntyre, L. 1996. Starting Out. In Human Resources Development Canada and Statistics Canada: *Growing Up in Canada. NLSCY.*

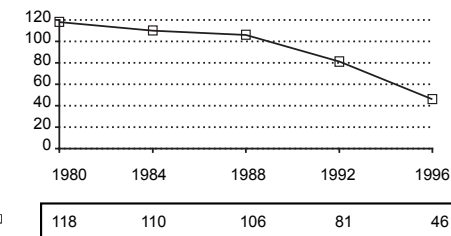
Experts agree that breastfeeding for six months or more is optimal for the health of the baby. To increase the percentage of women breastfeeding for the optimal length of time, active, community-wide efforts to promote and support breastfeeding are needed.

Sudden Infant Death Syndrome refers to the sudden and unexpected death of an apparently healthy infant, which remains unexplained after a full investigation. Factors potentially associated with an elevated risk of SIDS include smoking during pregnancy, exposure to environmental tobacco smoke after birth and infant overheating.

Sudden Infant Death Syndrome (SIDS) Rates

Canada, 1980-1996

SIDS deaths per 100,000 live births



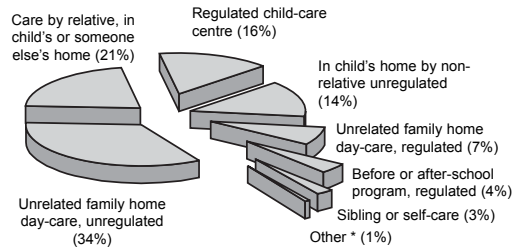
Source: Health Canada. 1999. *Canadian Perinatal Surveillance System.*



Childcare regulations are important to positive child outcomes. Parents placing their children in unregulated care cannot be guaranteed that health and safety standards are met, or that the childcare program is developmentally-based. However, in 1998, regulated childcare space was available for only 10% of children.

Distribution of Children From Birth to 11 Years, by Type of Non-Parental Child Care Arrangement

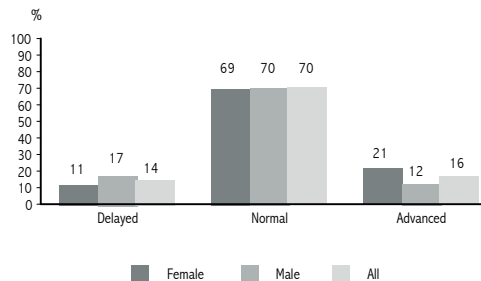
Canada, 1994-1995



* Estimate less reliable due to high sampling variability.
Source: Ross, D.P. et al. 1996. *Overview: Children in Canada in the 1990s*. In Human Resources Development Canada and Statistics Canada: *Growing Up in Canada*. NSLSCY.

Motor and Social Development Level, Birth to Age 3 Years of Age, by Gender

NLSY, 1996-1997



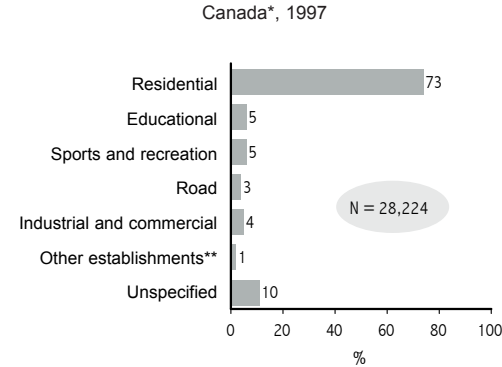
Source: Special run of the 1996/97 NLSY data conducted for CICH by Statistics Canada.

The early assessment of children with delayed development, and early intervention when problems are identified, benefits both the children and their parents.



Injuries by Location, Children Aged 1-4 Years

Canada*, 1997



* Cases reported by 15 Canadian hospitals of which 10 are paediatric, participating in Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP).

** Includes hospital.

Source: Special runs conducted for CICH by Health Canada, Bureau of Reproductive and Child Health.

The majority of injuries for children aged 1-4 years old occur in residential environments (either their own or caregivers). This highlights the need for appropriate supervision and protection in a home environment that has been adapted to the developmental stage of the child. For instance, older preschoolers can be protected from poisoning through a combination of supervision and safe storage of all toxic substances.

Gender Differences in Children Aged 4-11 Years, by Behaviour Domain and Gender

Canada, 1998

Behaviour	Male	Female
Child never destroys his/her own things	74%	86%
Child never destroys things belonging to others	84%	91%
Child never physically attacks people	79%	88%
Child often shows sympathy	40%	54%
Child will often help someone who has been hurt	57%	68%
Child often offers to help other children	39%	51%

Source: Caputo, V. and Kelly, K. 1998. *Gender and Health: Growing Up Male and Female in Canada*. Workshop Paper for: "Investing in Children: A National Research Conference, 1998."

The majority of children, both girls and boys, growing up in Canada, exhibit healthy behaviors. According to parental reports, girls aged 4-11 years are more likely to act in a consistently helpful and sympathetic manner whereas boys of the same age are at slightly elevated risk for engaging in negative behaviors.

Preschool



Receiving adequate stimulation, nurturance, protection and structure from parents or other adults is critical for children to successfully adapt to the developmental tasks during the preschool years.

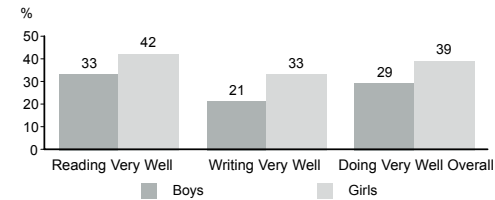
Dr. R. Dev. Peters

School Age



Gender Differences in Learning and Literacy Outcomes Among Children Aged 4-11 Years

Canada, 1994-1995



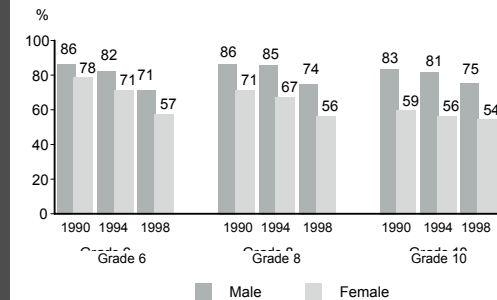
Source: Caputo, V. and Kelly, K. 1998. *Gender and Health: Growing Up Male and Female in Canada*. Workshop Paper for "Investing in Children: A National Research Conference, 1998".

Although the majority of children are succeeding at school, girls are more likely than boys to be doing very well. Research is needed to identify the reasons behind these gender differences among school age children.

Exercise frequency is an important health indicator as regular exercise promotes physical and psychological health. Gender is an important indicator of exercise habits, with females consistently exercising less than males.

Students in Grades 6, 8 and 10, Who Exercised* Two or More Times a Week Outside School Hours

Canada, 1990, 1994 and 1998



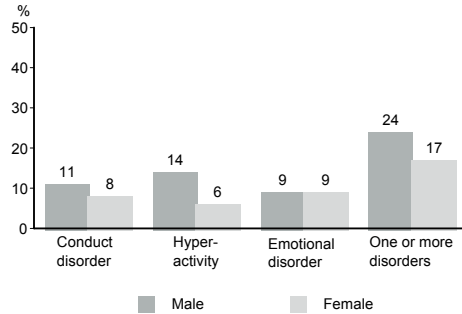
* Students were asked how often they exercise until they are out of breath, or are sweating, during their free time or outside of school hours.

Source: King, A.J.C. et al. 1999. *Trends in the Health of Canadian Youth*.



According to the parents' reports in the National Longitudinal Survey of Children and Youth, a significant proportion of children exhibited behavior consistent with conduct disorder, hyperactivity and other emotional disorders. Almost 3% of children aged 4-11 years were socially impaired by their problems.

Frequency of Problems, Children Aged 4-11 Years, by Gender
Canada, 1994-1995



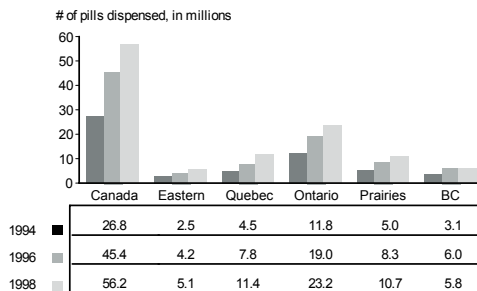
Source: Offord, D.R. and Lipman, E.L. 1996. Emotional and Behavioural Problems. In Human Resources Development Canada and Statistics Canada: *Growing Up in Canada*. NLSCY.



It is during this period (the school years) that boys and girls develop most of the habits of body, mind and spirit they will carry into their adult lives.

Senator L. Pearson

Number of Ritalin* Pills Dispensed in Canadian Retail Pharmacies
Canada, 1994, 1996 and 1998



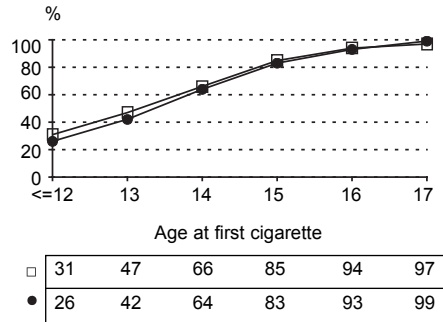
* Ritalin = Methylphenidate
Source: IMS HEALTH, CompuScript 1999.

There are growing concerns about the large number of school children receiving Ritalin. While it is effective in reducing school learning and peer problems for many children, it does not eliminate the need for flexible teaching skills that respect the different learning styles of children.



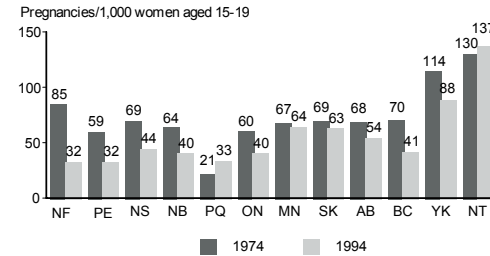
Youth who begin smoking in early adolescence are at greater risk of addiction than smokers who begin later in life. Youth who choose to smoke are often surrounded by family and friends who are smokers.

Cumulative Age at Onset of Smoking* by Gender
Canada, 1994



* Current smokers
Source: Health Canada. 1994. *Survey on Smoking in Canada. Cycle 1. Profile of Youth Aged 15-19.*

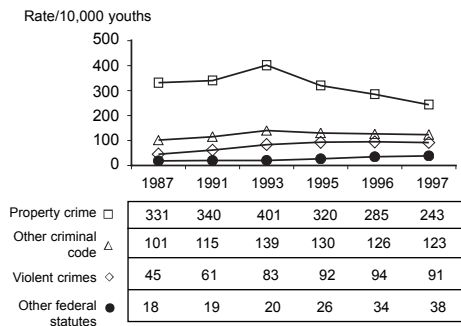
Teenage Pregnancy Rate*, Women Aged 15-19 Years
Provinces and Territories, 1974 and 1994



* Total of live birth, abortion, and miscarriage/stillbirth rates.
Source: Wadhwa, S. et al. (Statistics Canada). 1997. *Teenage Pregnancies. Health Reports. Vol. 9 No. 3.*

The teen pregnancy rate fell between 1974 and 1994, with 47 000 women between the ages of 15-19 becoming pregnant in 1994. Teen mothers and their children are at an increased risk of poverty and its associated problems.

Crime Rate for Youth Aged 12-17 Years
Canada, 1987-1997

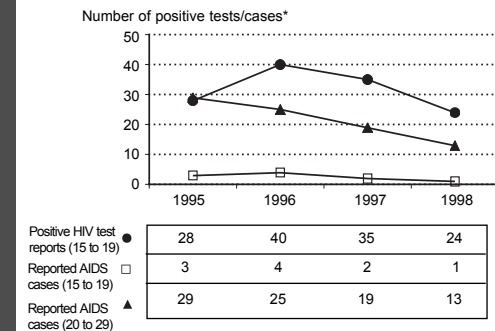


Note: The rate of youths charged includes only those 12-17 year olds who have been apprehended and charged by police.
Source: Stevenson, K. et al. (Statistics Canada). 1999. *Youth and Crime. Canadian Social Trends. Summer, No. 53.*

According to the National Crime Prevention Council, crime prevention must focus on young children and children living in conditions that place them at risk, such as poverty.

Infection with the Human Immunodeficiency Virus (HIV) represents a serious threat to health and quality of life. Individuals who develop AIDS are very vulnerable to serious infections and certain forms of cancer. The number of reported cases is not the same as the number of HIV infections, as many cases go unidentified.

Number of Positive HIV Test Reports and Reported AIDS Cases, Youth Aged 15-19 Years and Adults Aged 20-29
Canada, 1995-1998



* Last data reported to LCDC for the period ending June 30, 1999.
Source: Health Canada. 1999. *HIV and AIDS in Canada. Surveillance Report to June 30, 1999.*



Youth

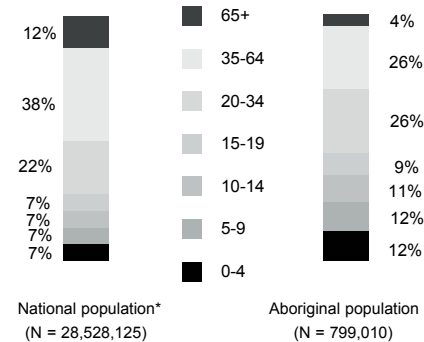
Addressing the risks as well as promoting the benefits of a healthy lifestyle in adolescence must become a national research priority.

Dr. R. Tonkin



Aboriginal Children & Youth

National and Aboriginal Population, by Age Group
Canada, 1996

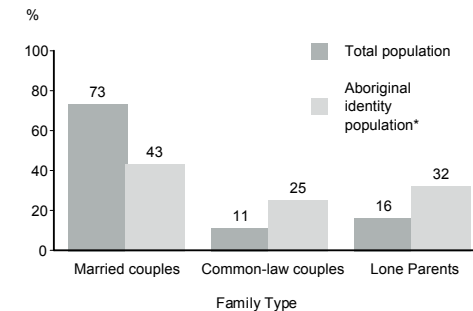


* National population includes Aboriginal population.
Note: Excludes 1996 Census data for one or more incompletely enumerated Indian Reserves or Indian Settlements.
Source: CIHC using Statistics Canada. 1998. *The Nation Series, Complete Edition*. 1996 Census.

The younger age distribution of Aboriginal peoples has implications for policy and program development, particularly in the areas of health, education, recreation and youth employment.

Although Aboriginal children are more likely to live with a lone-parent than non-Aboriginal children are, the majority of Aboriginal children live in a two-parent household.

Proportion of Children Birth to 14 Years of Age in Census Families, By Family Structure
Canada, 1996

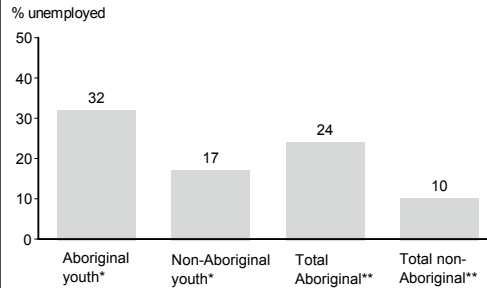


* The population who reported identifying with at least one Aboriginal group: North American Indian, Metis or Inuit
Source: Statistics Canada. 1998. *The Daily*. January 13, 1998.



Unemployment is associated with economic insecurity and family hardship. It also constitutes a threat to mental health. The unemployment rate for Aboriginal youth was 32%, almost double the rate for non-Aboriginal youth.

Unemployment Rates Among Aboriginal People
Canada, 1996

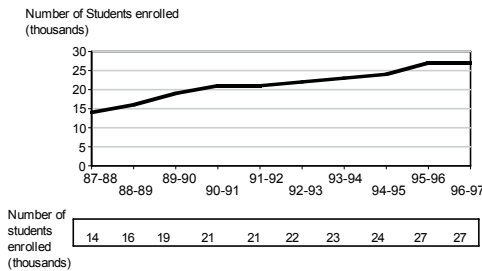


* Youth age 15-24 years
** Population age 15-64 years
Source: Statistics Canada. 1998. *A Profile of Youth Justice in Canada.*

Native children are faring so poorly because of complex historical and contemporary dynamics that play themselves out both on our reserves and in our cities.

Mr. K. Richard

Enrolment in Post-secondary Institutions, Registered Indian and Inuit Population
Canada, 1987-88 to 1996-97



Source: Department of Indian Affairs and Northern Development. *Basic Departmental Data 1997.*

The number of Registered Indian and Inuit young people enrolled in post-secondary institutions almost doubled between 1987-88 and 1996-97.

Children & Youth with Disabilities



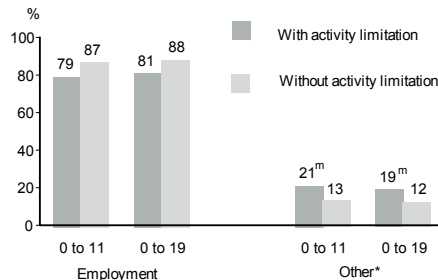
In 1996-97 there were, in Canada, approximately 564 575 children and youth between birth and 19 years of age (living in households) who had disabilities. This accounted for 7.7% of that population.

Number and Percentage of Children With a Limitation of Activity, by Age and Gender
Canada, 1996-1997

Age in years	Male N	Male %	Female N	Female %
0 to 9	169,537	10	80,393 ^m	5 ^m
10 to 19	151,858	7	162,788	8
Total	321,394	9	243,181	7

Note: Coefficients were determined using Statistics Canada "bootstrap" program for NPHS.
Note: Excludes don't know, refused, not stated, and not applicable. M= high sampling variability. Interpret with caution.
Source: CICH using Statistics Canada. *National Population Health Survey, 1996-1997*. Public Use Microdata Files

Source of Household Income by Activity Limitation Status and Age, Children Birth to 11 Years and Birth to 19 Years
Canada, 1996-1997



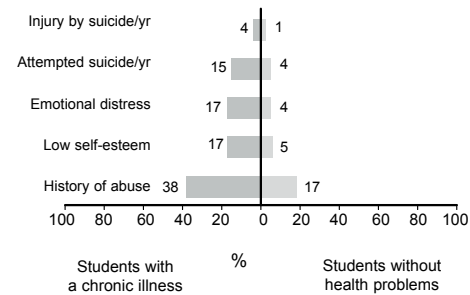
Note: Coefficients were determined using Statistics Canada's "bootstrap" program for NPHS.
Note: Excludes don't know, refused, not stated, and not applicable. M= high sampling variability (Reading left to right c.v.= 29, 19). Interpret with caution.
* Includes unemployment insurance, workers compensation, seniors benefits and other.
Source: CICH using Statistics Canada. *National Population Health Survey, 1996-1997*. Public Use Microdata Files

Parents with children with special needs often find it difficult to make satisfactory child care arrangements that would enable them to work full- or part-time.

Children & Youth with Disabilities



Mental Health Correlates of Being Chronically Ill/Disabled
British Columbia, 1992



Source: The McCreary Centre Society. 1994. *Adolescent Health Survey. Chronic Illness and Disability Among Youth in British Columbia*.

Children and youth with a chronic illness or disability were more than twice as likely to report a history of abuse than children and youth without health problems. A far greater percentage of them reported emotional distress and low self-esteem.

There is currently an urgent need for information on children with learning disabilities.

Children and Youth with Learning Disabilities

- Learning Disabilities are congenital or acquired neurological conditions that can affect all aspects of intellectual, social and emotional functioning.
- Approximately 10% - 12% of all children have some degrees of cognitive deficits and Learning Disabilities. One in ten children received some form or remedial education during 1995-96 (NLSCY). 51% of these children had Learning Disabilities.
- Learning Disabilities can have a profound effect on the lives of children, youth and adults. Children and youth with Learning Disabilities are at least twice as likely to drop out of school than their non-disabled peers. Further, youth with Learning Disabilities are substantially over-represented among young offenders.

Source: Learning Disabilities Association of Canada. 1999. *Fact Sheet: Learning Disabilities Statistics*.

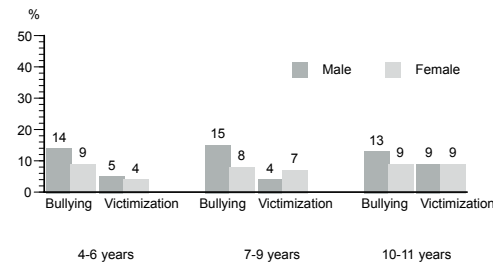


Canada has overlooked the needs of children with disabilities. Costly problems in their adulthood can be eliminated or greatly ameliorated through committed, vigorous initiatives right now.

Dr. S. H. Irwin



Prevalence of Bullying and Being a Victim of Bullying*
Canada, 1994-1995

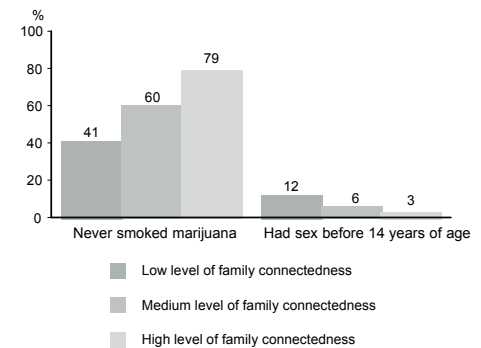


* By parent's report
Source: Craig, W. et al. 1998. *Bullying and Victimization Among Canadian School Children*. Workshop Paper for: "Investing in Children: A National Research Conference, 1998."

Bullying can have long-term negative consequences for both the bullies and the victims, such as increased criminality, school dropout and emotional disorders.

High levels of family connectedness (where the young person feels cared for and understood) are associated with positive mental health.

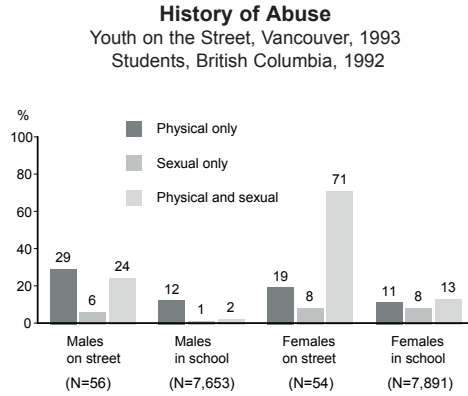
Family Connectedness and Risk Behaviour
British Columbia, 1998



Source: The McCreary Centre Society. 1999. *Healthy Connections: Listening to BC Youth. Highlights From the Adolescent Health Survey II*.



Abuse is a contributing factor to the decision to live on the street. Youth who live primarily on the street and sexually exploited youth lead lives characterized by an elevated risk of physical, psychological and emotional harm.

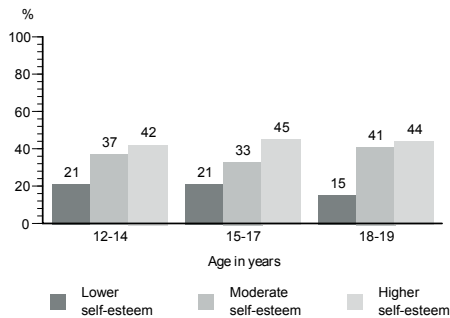


Source: The McCreary Centre Society. 1994. *Adolescent Health Survey: Street Youth in Vancouver.*

... the leading group of conditions that lower life quality and reduce life chances of Canadian children and youth... are emotional and behavioral and early learning difficulties.

Dr. D. R. Offord

Self-esteem, Children Aged 12-19 Years, by Age
Canada, 1994-1995



Self-esteem is an essential component of resiliency in the face of personal or social difficulties. The majority of youth, 12 to 19 years of age, reported moderate to high levels of self-esteem in 1994-95.

Source: Stephens, T. et al. 1999. *Mental Health of the Canadian Population: A Comprehensive Analysis. Chronic Diseases in Canada.* Vol. 20 No. 3.

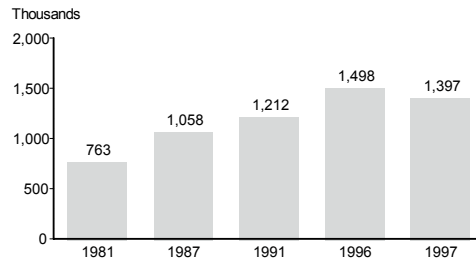
Income Inequity



Children who live in poverty encounter more hurdles to a healthy development and are at an elevated risk for a wide range of negative health outcomes.

Number of Children Living in Poverty, Under 18 Years

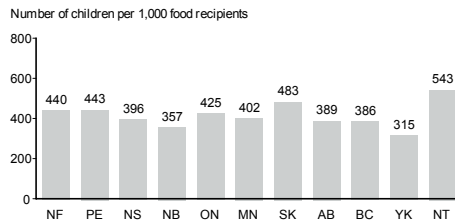
Canada, 1981, 1987, 1991, 1996 and 1997



Source: Statistics Canada. 1998. *Low Income Persons, 1980-1997*. Hanvey et al. 1994. *The Health of Canada's Children: A CICH Profile*.

Proportion of Children Among Food Bank Recipients

Canada, Provinces and Territories, 1998



* Quebec data not available.
Canadian Association of Food Banks. 1999. *HungerCount 1998: Emergency Food Assistance in Canada*.

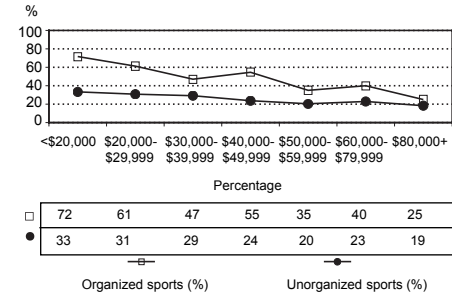
Children, who represent 27% of the population in Canada account for 31% to 54% of the food recipients at food banks across Canada. The widespread use of food banks indicates that many families lack food security.

Income Inequity



Children Rarely Participating in Organized and Unorganized Sports, by Income*

Canada, 1994-1995



* Average household income.
Note: Calculations are based on two-parent families with children aged 4-11 years.
Source: Canadian Council on Social Development. 1999. *Income and Child Well-being: A New Perspective on the Poverty Debate*.

Participation in organized recreation and sports contributes to healthy development of children, protecting, to some extent, against emotional and behavioral problems. Children living in households with lower income levels are less likely to participate in organized sports than children in families with higher incomes.

Low-income families are at a disproportionate risk of exposure to environmental contaminants. There is a need to better understand the contaminant risks experienced by children from low income families.

Low Income Families and Exposure to Environmental Contaminants

- Low income families live downwind, downstream and downhill from sources of environmental contaminants.
- They live in the most dangerous neighbourhoods and work in the most dangerous occupations. Both at home and at work, they are at increased risk of exposure to hazardous substances.
- Research indicates that, not only are poor people exposed to more hazards more often, they are also vulnerable to the adverse effects.

Source: Pollution Probe. 1998. *The Air Children Breathe: The Effects on Their Health*.

Income Inequity



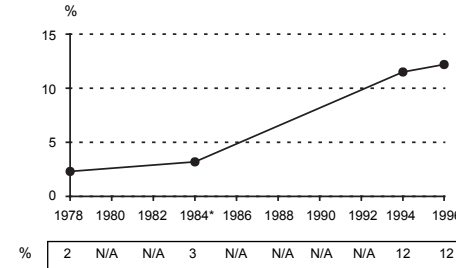
November 1999 marked the 10th anniversary of the unanimous all-party resolution in the House of Commons to end child poverty by the year 2000. Sadly, we did not make it.

D. P. Ross

Environmental Health



Reported Asthma Prevalence, Birth to 19 Years
Canada, 1978-1996



* 1984 survey includes 0-14 years of age only.
Note: Percentages are weighted estimates.
Source: Health Canada. 1999. *Measuring Up: A Health Surveillance Update on Canadian Children and Youth.*

Researchers are investigating the relationship between asthma and air quality. Indoor air pollutants implicated include environmental tobacco smoke, mold and animal dander. Outdoor contaminants implicated include ground level ozone.

The causes of neurobehavioral disorders such as ADHD are unknown, and most substances to which children are exposed regularly, including food additives and pesticides, have not been evaluated for their potential to affect brain development. More research into the possible association between exposure to environmental contaminants and neurobehavioral effects is needed.

Neurobehavioural Effects





Children receive greater exposure to environmental toxins than adults because they eat more food, drink more water and breathe more air per unit of body weight than adults. PCP is a wood preservative and exposure to it can cause skin or respiratory irritation, cold- and flu-like symptoms and has been associated with some forms of cancer.

**Estimated PCP* Intake
(NG/KG bodyweight/day)****
Canada, 1992

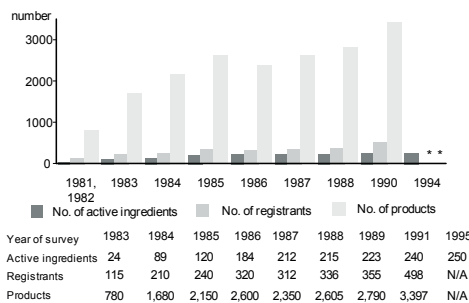
Environmental media	Infants	Toddlers	Children	Adults
Air	11	13	14	10
Drinking water	0	0	0	0
Soil/dust	2	3	0	0
Food	99	105	50	28
Total PCP	112	121	65	37

*PCP = Pentachlorophenol
**= numbers have been rounded
Source: Coad, S. and Newhook, K.C. 1992. PCP Exposure for the Canadian General Population: A Multimedia Analysis. *Journal of Exposure Analysis and Environmental Epidemiology*.

We are passing to our children and subsequent generations a much abused natural environment... will our children curse us for the environments we leave them?

Dr. T. Hancock

Pesticide Sales in Canada, 1981-1994



Pesticides present potential hazards to human health. They are widely used in agriculture in Canada. Pesticides enter water through run-off from fields and can be tracked into the house on shoes and clothing.

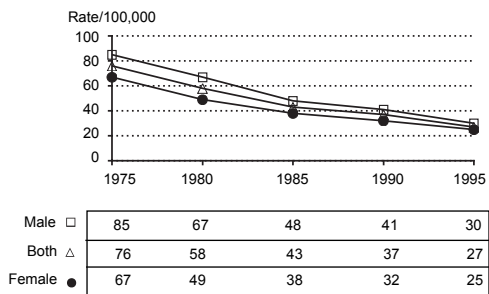
*N/A
Note: Each survey was conducted one year after the data findings. The 1983 sales figures were conducted in 1984.
Source: Environment Canada. 1996. *Conserving Canada's Natural Legacy* (CDRom).



Mortality

Injury and poisoning were the greatest single cause of death for preschool children in 1997 accounting for 32% of deaths. Birth defects (13%) and cancer (11%) were also important causes.

Death Rates All Causes, Children Aged 1-4 Years
Canada, 1975, 1980, 1985, 1990 and 1995



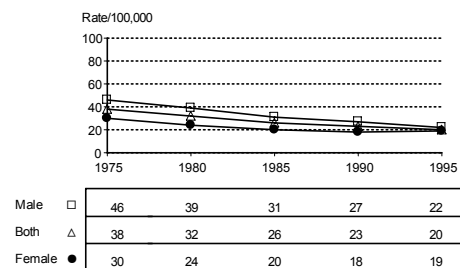
Source: CICH using Statistics Canada. 1997. *Births and Deaths, 1995.*



Mortality

In 1997, external causes of injury (including poisoning) were the leading causes of death for children aged 10-14, accounting for 52% of all deaths (204 deaths).

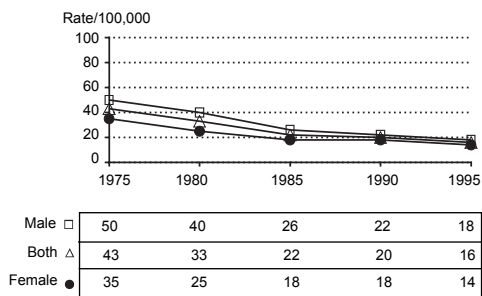
Death Rates All Causes, Children Aged 10-14 Years
Canada, 1975, 1980, 1985, 1990 and 1995



Source: CICH using Statistics Canada. 1997. *Births and Deaths, 1995.*

Death Rates, All Causes, Children Aged 5-9 Years

Canada, 1975, 1980, 1985, 1990 and 1995



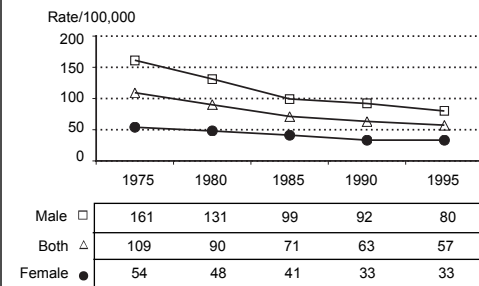
Source: CICH using Statistics Canada. 1997. *Births and Deaths, 1995.*

In 1997, external causes of injury were the leading causes of death among 5-9 year olds, accounting for 41% of deaths (almost 130 deaths). This means that many of the deaths in this age group may have been preventable.

External injuries were the greatest cause of death for youth in 1996-97, accounting for 75% of male deaths and 66% of female deaths.

Death Rates All Causes, Youth Aged 15-19 Years

Canada, 1975, 1980, 1985, 1990 and 1995



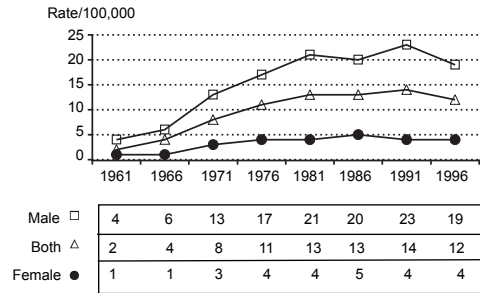
Source: CICH using Statistics Canada data. 1997. *Births and Deaths, 1995.*



Mortality

Suicide death rates for male youth climbed dramatically between 1961 and 1991. Between 1991 and 1996, however, the rate decreased. The suicide death rate for female youth has remained stable at about 4/ 100 000 since 1976.

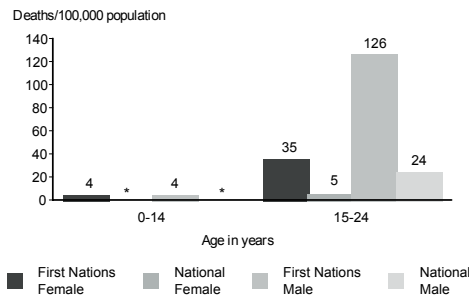
**Suicide Rates For Youth,
Youth Aged 15-19 Years
Canada, 1961-1996**



Source: Harvey, L. et al. 1994. *The Health of Canada's Children: A CICH Profile, 2nd Edition*. Statistics Canada. 1999. Canada Year Book 1999 on CD-Rom.

Suicide Death Rates by Age Group

First Nations and Canadian Populations, 1989-1993



* Numbers too small to report.
Source: Health Canada. 1996. *Trends in First Nations Mortality, 1979-1993*.

The suicide rates for Aboriginal youth are alarming. Mental health promotion is essential, as are opportunities for young people to participate in higher education, paid and volunteer work, recreation, sports and community life.



What can the CICH Profile be used for?

- As an aid or resource for training**
- As a resource for writing articles**
- As a source of existing data on children's health**
- To help develop, implement or change policies**
- To facilitate networking**
- To promote public awareness of child health issues**
- To promote professional awareness of child health issues**