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## REACHING FOR THE TOP

A Report by the Advisor on Healthy Children

X Youth Dr. K. Kellie Leitch





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#### Minister:

As Canadians, we are very fortunate in so many ways. We have tremendous opportunities to reach our full potential in a free, welcoming, and ambitious country. For those of us who were born in this country, it has often been said that we are among the luckiest people in the world.

Yet, when it comes to providing the best possible health environments for our children and youth, we have the need – and the capability – to do better as a country.

During my consultations and work as your Advisor on Healthy Children and Youth, I had the opportunity to meet with over 750 people, and review more than 500 documents and reports. It was a tremendously rewarding experience and one that I shall always remember.

From this work, I have drawn three fundamental conclusions.

Firstly, that we are doing surprisingly poorly when compared to other OECD countries in measures of the health and wellness of children and youth. Among 29 OECD nations:

- Canada ranks 22<sup>nd</sup> when it comes to preventable childhood injuries and deaths;
- Canada ranks 27<sup>th</sup> in childhood obesity; and,
- Canada ranks 21st in child well-being, including mental health.

Secondly, that in today's increasingly competitive global economy, we must invest in the health and wellness of our children and youth in the same way that we invest in infrastructure or science and technology. Indeed, our children and youth are our future, and they are also fundamental to our nation's economic success in an ever more competitive world.

Thirdly, that Canada has the potential – and the ability – to be the number one place in the world for a child to live and grow up, from a health perspective. Ours is a nation that has grown strong because of great goals and bold plans. While there is much work that needs to be done to help our young people to be healthier and to stay healthy, we can, should, and must be optimistic. To succeed, we must set benchmarks and measure results. To become the world's best, we must measure ourselves against those who are the world's best *today*.

With these conclusions in mind, this report makes **five key recommendations**. They are as follows:

- 1. Develop and implement a **National Injury Prevention Strategy** for children and youth;
- 2. Establish a Centre of Excellence on Childhood Obesity;
- 3. Improve Mental Health Services for Canadian children and youth;
- 4. Undertake a Longitudinal Cohort Study to provide data on the health of Canadian children and youth to help understand environmental factors impacting children's health; and,
- 5. Establish a National Office of Child and Youth Health with a permanent Advisor.

I want to acknowledge and thank the Canadians who took the time to speak with me, and to share their views through our online survey. While I encountered many different perspectives and points of view, one thing united all of the people with whom I met: their passion and commitment to improving the health and wellness of children and youth in our country. That passion is an asset in and of itself.

Minister, there are 95 recommendations catalogued in the conclusion of my report. These should not be seen as a critique of what exists, but rather as opportunities to improve the health system, and to keep children and youth healthy and well.

I appreciate and acknowledge the latitude I have had in examining issues beyond the mandate of Health Canada and the Public Health Agency of Canada. That latitude has allowed for a more holistic approach to be taken, and I believe it will yield better outcomes for Canadian children.

It is my belief that these recommendations will help chart a better course for the federal government's current and future programs related to the health and wellness of children and youth, and ultimately pay tremendous dividends through improved health outcomes.

Thank you for the opportunity to participate in this very important and exciting work.

Sincerely,

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# **Executive Summary**

"This Report is all about helping children to be healthier, so that they can live better, happier, more productive lives."

### **Executive Summary**

#### **BACKGROUND**

When you work at a hospital with sick and injured children, you passionately want to improve these children's lives – and the lives of their families. It is even better to find ways of *preventing* illness and injury in the first place, reducing the requirement for so many children to need hospitalization and acute care.

That's what this Report is all about – helping children to be healthier, so that they can live better, happier, more productive lives. It is also about giving every child an opportunity to achieve the <u>same</u> health outcomes – no matter what background they are from. Each finding and recommendation in this document is important in and of itself. But taken together, they combine to deliver what would be a quantum improvement in the health and wellness of Canadian children and youth.

This matters to children – who will then be able to spend more time playing and learning.

This matters to parents – who bear a tremendous personal and financial burden when one of their children has a debilitating illness or injury, and want nothing more than for their children to be happy and well.

And this matters to Canadian society – because healthier children will become happier, more successful adults. From a public policy perspective, investing in the health of our children is as essential to our growth as a nation as investing in infrastructure.

Seeking recommendations to help improve the health and wellness of Canada's children and youth, Canada's Health Minister, the Honourable Tony Clement, asked for this Report. It provides advice related to existing federal government programs, the need for new policy directions and programs and the concept of establishing an office for the health and wellness of children and youth.

Children's health issues – and the factors that determine their health and wellness – are multi-faceted and complex. For that reason, this Report is extensive and the analysis that contributed to it was rigorous. This work was supported by a nation-wide consultation with parents, children and youth and an extensive review of the existing literature related to the health and wellness of children and youth.







## KEY CONCLUSIONS AND RECOMMENDATIONS

Canada is among the most prosperous nations in the world. We boast a universally accessible health care system, and a large number of generous social programs – many of which were conceived to help children and youth stay healthy.

Yet, Canada's standing when it comes to the health and wellness of children and youth is remarkably poor. Among 29 OECD nations:

- Canada ranks 22<sup>nd</sup> when it comes to preventable childhood injuries and deaths;
- Canada ranks 27<sup>th</sup> in childhood obesity; and,
- Canada ranks 21<sup>st</sup> in child well-being, including mental health.<sup>1</sup>

Overall, Canada only ranked 12th out of 21 wealthy countries in the United Nations' rankings of child well-being.<sup>2</sup>

We can – and we must – do better. That starts with setting bold, visionary goals. Canada has the potential and the ability to be the number one place in the world for a child to live and

grow up, from a health perspective. The recommendations and suggestions that follow are designed to help Canada achieve this goal.

Setting benchmarks and measuring results is an important theme in this report. We need to measure ourselves against the best in the world, so that we can become the best in the world.

There are many recommendations in this Report, covering a wide range of issues. However, there are **five specific items** that merit particular emphasis and attention. These are:

- Developing a National Injury Prevention Strategy;
- 2. Reducing childhood obesity by establishing a Centre of Excellence on Childhood Obesity;
- 3. Improving mental health services for Canadian children and youth;
- 4. Undertaking a longitudinal cohort study to provide data on the health of Canadian children and youth to help understand environmental factors impacting children's health; and,
- 5. Establishing a National Office of Child and Youth Health with a permanent Advisor.

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"The time to
ACT is NOW!
MANY LIFE-LONG
DISEASES BEGIN IN
CHILDHOOD."

"Given the prevalence of childhood obesity, and given its contribution to many diseases, this is the first generation that may not live as long as their parents. Obesity is now having a huge life expectancy impact, which was not foreseen ten years ago.

**ACTION** CAN BE TAKEN that will help children and youth to live longer, healthier, more productive lives."

#### **Five Priority Action Items**

## 1. A NATIONAL INJURY PREVENTION STRATEGY

Unintentional injury remains the leading cause of death for children ages one to fourteen. In fact, injuries account for more deaths in children and youth than all other causes of death combined.

We can take actions that will reduce the risk of severe injury among Canadian children – by preventing many of these injuries from ever happening in the first place, or dramatically reducing their impact.

Among others, key recommendations in this area include:

- Creating a Strategic Plan for Injury Prevention for Children and Youth.
   The Government of Canada should take the lead role in the development and implementation of this five-year national strategic plan to be established in the next twelve months.
- Supporting Helmet Use. Extending the Children's Fitness Tax Credit to include the purchase of protective helmets used in physical activities that qualify within the guidelines of the Children's Fitness Tax Credit.
- Eliminating Toxic Toys. The
   Government of Canada should enact
   legislation that includes restrictions
   on hazardous substances in products
   designed for children and youth,
   such as lead and mercury.
- Promoting Booster Seats and Protective Equipment. Encourage provinces to show leadership and make mandatory the requirement for booster seats for children aged 4-8 until they weigh 36-45 kg (80-100 lbs.) or until they are 132-145 cm (52-57 inches) in height.

#### 2. REDUCING CHILDHOOD OBESITY

According to the World Health Organization, being overweight due to poor nutrition and lack of physical activity is one of the greatest health challenges and risk factors for chronic disease in the 21<sup>st</sup> century. Over-consumption of unhealthy foods has been called the "new tobacco" based on its increasingly negative impact on people's health.

Many life-long diseases begin in childhood. Given the prevalence of childhood obesity, and given its contribution to many diseases, this is the first generation that may not live as long as their parents. Obesity is now having a huge life expectancy impact, which was not foreseen ten years ago.

Action can be taken that will help children and youth live longer, healthier, more productive lives.

Among others, key recommendations in this area include:

- Setting Obesity Targets. The Government of Canada should seek to reduce the rate of childhood obesity from 8% to 5% by 2015.
- Promoting After-school programs.
   The federal government should show leadership by being the driving force supporting organizations that provide excellent after-school programs to support able-bodied and disabled children.
- Creating a Centre of Excellence on Obesity. Focusing experts from multiple fields on this challenging issue.
- Increasing physical activity. Achieve a 20% increase in the number of Canadian children and youth who are physically active, eat healthily, and are at healthy body weights by 2015.



 Banning junk food advertising to children. The CRTC should examine the option of banning the advertising of junk food on children's programming targeted to children under 12 by 2010.

## 3. IMPROVING MENTAL HEALTH SERVICES TO CANADIAN CHILDREN AND YOUTH

Eighty percent (80%) of all psychiatric disorders emerge in adolescence, and are the single most common illness that onset in the adolescent age group. Unfortunately, only one in five Canadian children who <u>need</u> mental health services currently receives them.

The national mental health strategy being developed by the Mental Health Commission includes a focus on children and youth mental health issues, as mental health problems among children and youth are predicted to increase by 50% by the year 2020.

Among others, key recommendations in this area include:

- health services. This is a complex issue with no simple solutions. To explore the best way to proceed in greater detail, an **Expert Panel** on access to paediatric mental health services should be established and be tasked with specifically examining health human resource issues as they relate to mental health services for children and youth.
- Establishing a Wait Time Strategy for paediatric mental health. It is recommended that a National Wait Time Strategy for child and youth mental health services be developed in the next twelve months.

Addressing health human resource constraints through training.
 Governments should work with non-governmental organizations (NGOs), academic organizations and health care institutions to increase the training capacity of the entire spectrum of mental health professionals and ensure that this training includes specific clinical instruction on child and youth mental health issues.

#### 4. LONGITUDINAL COHORT STUDY

To determine the success of programs and policies that help improve the health and wellness of Canada's children and youth – and then subsequently adjust those programs to make them more successful – high-quality data and information is essential.

Today, Canada does not have a tracking study in place to successfully measure changes in the environment that impact on the health of children and youth.

The key recommendation in this area includes:

• Establishing a longitudinal cohort study. Implement a cohort study to provide longitudinal data on the health of Canadian children, neonates to age 8, monitoring their health status and outcomes over ten years.

## 5. NATIONAL OFFICE OF CHILD AND YOUTH HEALTH

At present, there is no prism to examine the impact legislative issues, policies or programs are having on the health and wellness of children and youth. This Report therefore recommends:

 Creating a National Office of Child and Youth Health with a permanent Advisor.
 This Office and Advisor would report to the Minister of Health on the health status of Canadian children and youth.

## THE APPROACH TO THE ANALYSIS WITHIN THIS REPORT

This Report was the result of:

- A consultative process of roundtables and meetings with parents, children, youth, key stakeholders, provincial representatives, and stakeholder organizations;
- An extensive analysis of the programs and policies currently provided by Health Canada and the Public Health Agency of Canada;
- A detailed review of existing reports, studies, and papers from Canada and around the world on child and youth health; and,
- An online survey that received thousands of responses.

Based on this work, a number of child and youth health challenges were uncovered. However, it is in Canada's grasp to be the number one nation in the world for a child to live and to grow up from a children's health perspective. With the federal government's leadership – and the collective commitment of provincial and territorial governments, organizations, parents, and children themselves – we can achieve this goal.

## THE ROLE OF THE FEDERAL GOVERNMENT

In addition to the role the federal government plays in providing health services to children and youth within Canada's First Nations on reserve and Inuit populations, there are six **specific federal roles** that Canadian parents and child/youth organizations believe will help improve the health and wellness of Canadian children and youth. These are:

- Providing leadership;
- Setting national standards;
- Fostering collaboration and networking among NGOs, industry, governments, and parents;
- Data collection and dissemination;
- Encouraging research and especially promoting the need for translational and knowledge transfer research in collaboration with NGOs and industry; and,
- Undertaking and supporting social marketing activities to communicate and promote healthy behaviours and activities.



#### **Evaluation of Existing Programs**

A core aspect of the mandate of this Report was to analyze existing programs provided by both Health Canada and the Public Health Agency of Canada targeted to children and youth.

Among others, key recommendations within this Report related to existing programs include:

- 1. The need for appropriate data management and surveillance;
- 2. The expansion of Aboriginal Head-Start; and,
- 3. The re-orientation of the Centres of Excellence for Children's Well-Being to ensure they are focused on these key priorities including injury prevention and safety, obesity and healthy lifestyles, and mental health.

## 1. DATA MANAGEMENT AND SURVEILLANCE

**Data and information management are fundamental.** Data collection, management, and surveillance are the basic building blocks of research. This data, if it is substantive, comparable, and "clean", is invaluable in the development of public policy and programs which can have a meaningful impact on child and youth health. It is **only** with appropriate and substantial data that evidence-based decisions can be made.

**Better coordination** is required among the national data collection agencies and large research projects associated with child and youth health. Throughout the consultations, three significant issues with respect to data were raised:

- 1. Access to data is tedious, and often not achievable:
- 2. Data sets are not linked; and,
- 3. Data sets are often not comparable.

Appropriate data collection and dissemination ultimately results in better decision-making. When there is more reliable, high-quality data available, better results on the front-line can be achieved. The data collected for evaluative, research or surveillance needs must become more accessible.

Among others, a key recommendation in this area includes:

Standardizing data sets. Mechanisms
 of coordination and improved access
 must be created between Statistics
 Canada, the Canadian Institute for
 Health Information, Health Canada and
 the Public Health Agency of Canada in
 order to create appropriate comparable
 data sets that are easily accessible to
 clinicians, researchers, and organizations
 that are involved with child and youth
 programs and policy development.

#### 2. ABORIGINAL HEAD START

There are increasing amounts of data that confirm the benefits that can come from investing in early childhood development. Current Head Start programs designed to support Aboriginal children have been successful.<sup>3</sup>

Therefore among others, a key recommendation in this area includes:

 Expanding Aboriginal Head Start programs to reach 25% of the eligible children on and off reserve.

## 3. CENTRES OF EXCELLENCE FOR CHILDREN'S WELLBEING

Today, the federal government supports four Centres of Excellence for Children's Wellbeing. There are some excellent activities occurring at these Centres. However, they need to be truly internationally ground-breaking in their work, and more focused on the issues that are most critical to Canadian parents, children, and youth.

Among others, a key recommendation in this area includes:

 Centres of Excellence redefining their focus. Specifically, they should deliver outcomes and champion best practices that will address injury prevention and safety, obesity and healthy lifestyles, and mental health.

#### **ADDITIONAL RECOMMENDATIONS**

Based on the input and analysis undertaken in this Report, a number of opportunities were identified that will have a tremendous impact on the health of Canada's children and youth.

In addition to the key recommendations previously cited, the following are additional recommendations focused not only on helping Canada become a world leader in the health of its young people, but also on making a real difference in children's lives ... one child at a time.

#### Disabilities

- Increase opportunities for children and youth with disabilities to participate in physical activity, and specifically:
  - Provide infrastructure support for the development of skills development and recreation facilities that allow children with disabilities to fully experience recreation and sport activities; and,
  - Create an incentive for NGOs to operate programming that is accessible to children with disabilities.
- Introduce income splitting for parents with a child or youth with disabilities to reduce their tax burden.

#### **Chronic Illness and Disease**

- Incent parents to immunize their children by linking the National Child Benefit to immunizations;
- Emulate the approach taken by the province of Ontario to ensure that all children can access and administer their necessary medications in class, such as Epi-pens, insulin, and asthma puffers;



- Include support for insulin pumps within the Canadian Diabetes Strategy;
- Increase the length of the Employment Insurance (EI) benefit availability for Compassionate Care leave for parents with a child with a terminal illness; and,
- Develop a template for Emergency Preparedness for national emergencies (e.g. SARS) to be available to all schools, NGOs, and paediatric hospitals.

#### **Aboriginal Children and Youth**

- Undertake tuberculosis surveillance in Northern Canada and introduce appropriate Public Health interventions to control this surprising and potentially catastrophic epidemic; and,
- Apply Jordan's Principle, whereby the health care needs of aboriginal children are addressed regardless of the jurisdiction of the health provider organization.
   One approach to the administration of this principle would be for the federal government to pay up front, and then recover costs through transfer payments to the provinces that would be reasonable to expect provincial governments to pay.

#### **IN SUMMARY...**

"Children are critically important. We must keep them healthy and help them when they are not."

This Report makes bold recommendations, because Canadian young people are bold. They want to be healthy. They want to succeed. They want a better tomorrow for themselves, for their families, and for the country they are proud to call home. Many of these recommendations are substantial because the progress we need to make is substantial – and we are not where we can or should be based on existing programs, systems, and structures. **That's why things need to change.** 

This country can and should be home to a more prosperous tomorrow and a bright future for our next generation.

Let that future begin today.



# Background: An Opportunity to Improve and to Thrive

"Canada has the potential and the ability to be the number one place in the world for a child to grow up in from a health perspective. We have the resources and the capabilities to reach this goal."

### **Background:**

### An Opportunity to Improve and to Thrive

#### **ADVISOR'S MANDATE**

On March 8<sup>th</sup>, 2007, Canada's Minister of Health asked that Dr. K. Kellie Leitch serve as the Advisor on Healthy Children and Youth. It was within this capacity that Dr. Leitch consulted with Canadians and developed the recommendations within this Report.

For this Report, the Minister asked Dr. Leitch to:

- Evaluate the existing programs at Health Canada and the Public Health Agency of Canada that impact child and youth health;
- 2. Provide strategic direction on the issues and challenges facing Canadian children and youth (including the challenges and priorities facing the provinces and territories); and,
- Provide advice on whether a possible mechanism could be established to ensure Canada's Minister of Health has independent and transparent advice on how to maintain and improve the health of children and youth.

Based on the input received from experts, parents, and children and youth across Canada, a number of concerns and recommendations in this Report stretched beyond the limited

scope of Health Canada and the Public Health Agency of Canada. Building upon the issues raised by Canadians, this Report takes a more holistic approach – one that will ultimately yield better outcomes for Canadian children and youth.

## AN OPPORTUNITY TO IMPROVE AND TO THRIVE

As Canadians, we believe that ours is a society in which our children and youth should lead happy, healthy lives. At the time this Report was written, Canada ranked 13<sup>th</sup> out of 21 OECD countries in terms of the health and safety of our children and youth, showing that there is much room for improvement.<sup>4</sup> We owe it to our children to do better.

That starts with setting bold, visionary goals. Canada has the potential and the ability to be the number one place in the world for a child to grow up in from a health perspective. We have the resources and the capabilities to reach this goal.

Canadian children and youth from all socio-economic backgrounds are vulnerable. Vulnerability is measured by key behavioural and cognitive tests measuring vocabulary, mathematics, emotional health, and violent behaviour tendencies.

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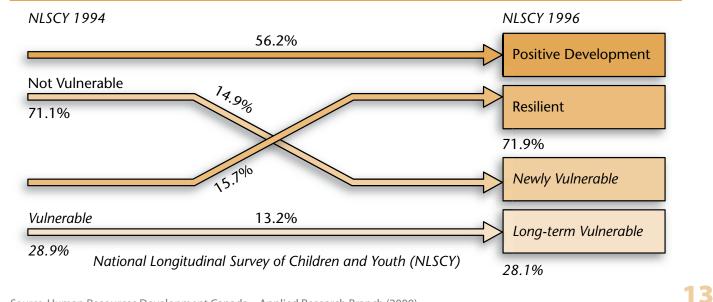
"AS CANADIANS, WE BELIEVE
THAT OURS IS A SOCIETY
IN WHICH OUR CHILDREN
AND YOUTH SHOULD LEAD
HAPPY, HEALTHY LIVES."



The good news is that vulnerability in childhood and youth is not a permanent state. The Canadian National Longitudinal Survey of Children and Youth revealed that many vulnerable children did not remain the same from one cycle to the next. The percentage of vulnerable children (28%) remained unchanged; however, in the second cycle, 16% were no longer considered vulnerable, while a new 15% of children became vulnerable. While 13% remained vulnerable throughout both cycles, the results suggest that 87% of children may experience vulnerability, but the situation is not permanent.<sup>5</sup>

This is great news: it means that investments in best practice services and targeted initiatives can have a direct impact on improving and shaping the lives of Canadian children and youth. But to be successful, investments need to be made in the right programs and policies. These policies and programs must be built upon evidence based research, and performance-based techniques. They must also be delivered in a professional, outcome-driven way.

#### **NEW RESEARCH: VULNERABILITY IS NOT PERMANENT<sup>6</sup>**



Source: Human Resources Development Canada – Applied Research Branch (2000).

We can - and we must - do better.

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- Canada ranks 27<sup>th</sup> in childhood obesity; and,
- ► Canada ranks 21<sup>st</sup> in child well-being, including mental health.



#### INTERNATIONAL STANDARDS AND COMPARISONS: WHAT DO THE INTERNATIONAL COMPARISONS TELL US

#### **Comparison with Peer Countries**

How does Canada compare to peer countries? The UNICEF Innocenti Research Centre Report Card provides a comprehensive assessment of the lives and well-being of children and young people in 21 industrialized nations. The purpose of the Report Card is to encourage monitoring, to permit comparison, and to stimulate the discussion and development of policies to improve children's lives. The Netherlands, Sweden, Denmark, Finland, and Spain rank the highest in support of child and youth issues. Canada ranks in the bottom half of OECD nations on this Report Card, ranking 12<sup>th</sup> of 21.<sup>7</sup>

Canada's standing when it comes to the health and wellness of children and youth is remarkably poor. Among 29 OECD nations:

- Canada ranks 22<sup>nd</sup> when it comes to preventable childhood injuries and deaths;
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- Canada ranks 21<sup>st</sup> in child well-being, including mental health.<sup>8</sup>

Infant mortality is recognized internationally as one of the most important measures of the health of a nation and its children. It is also an important indicator of the health of pregnant women. Iceland has been able to reduce its rate to 2.4 deaths per 1,000 live births, making it the world benchmark. While Canada's infant

mortality rate has declined significantly over the past decade from 6.8 deaths per 1,000 live births in 1990 to 5.3 in 2003, other OECD countries have been able to achieve more rapid reductions in infant mortality rates. As such, **Canada ranks 21**st out of 30 OECD nations in terms of infant mortality. While the infant mortality rate among First Nations people fell dramatically between 1979 to 1994 (from 28 deaths per 1,000 live births to 12 per 1,000), since then rates have stagnated. However, infant mortality is still twice as high among First Nations people as in the Canadian population as a whole.<sup>9</sup>

According to international reports, Canada ranks in the bottom third of 21 OECD nations when looking at family and peer relationships (18<sup>th</sup>), behaviour and risks (17<sup>th</sup>), and overall subjective well-being (15<sup>th</sup>). The last category, subjective well-being, captures self-reporting from youth themselves in terms of their perception about their own health status, educational experience, and lives overall. While this is a disturbing trend, given Canada's outstanding health care professionals and organizations, best practice solutions and commitment to excellence, there is no reason why these indicators cannot dramatically improve.

What these rankings tell us about the health of Canadian children is **that we have a long way to go to be the world leader in significant health measurements.** We simply must do better. To achieve this, there must be a renewed focus on the issues that are influencing the well-being of children and youth such that initiatives may be implemented to improve their global health.



## Canada's Children and Youth as a Source of Global, Competitive Advantage

Canada must participate in an increasingly competitive world. Countries like India and China are investing tremendously in health care and education – especially in the training of physicians, scientists, and engineers.

These countries understand that the number one source of long-term sustainable competitive advantage of their nations is their young people. They are therefore investing heavily in the health, education, and training of their children and youth.

In Canada, we need to take a similar approach. Not only because it is good social policy to invest in the health and education of children – it is also good *economic* policy. **We need to change the paradigm of how we think about investing in the health of children and youth.** These aren't costs – they're investments that will pay off in terms of our overall quality of life and standard of living.

Canada needs to take a long-term view. By planning carefully and using evidence-based best practice methods to create strong foundations, we pave the way now for our 'human' infrastructure to last longer and be more productive. That human infrastructure will then require fewer 'repair' costs in the future, and will pay out financially when compared to other government investments.

It has repeatedly been demonstrated that investments in children and youth help them throughout life. Every dollar invested during childhood is worth 3 to 18 dollars later in life in savings.<sup>11</sup>

These data convey a simple message: pay a little now, or pay a lot later.

However, investing in the health of children and youth is not without challenges. Comparable data is required such that outcomes and indicators are the same for each province and territory – as well as internationally – so that all initiatives and programs which impact on Canadian children and youth are driving towards the same outcomes and goals. We should not be raising the bar for a select few children in a specific region, but for **all** Canadian children.

Finally, there must be a link between the data collected and meaningful indicators. Indicators and meaningful information can drive policy and program decision making that can positively impact on the health outcomes of children and youth across the country.

## MAKING CANADA THE NUMBER ONE PLACE IN THE WORLD FOR A CHILD TO LIVE AND GROW UP, FROM A HEALTH PERSPECTIVE

It is within Canada's grasp to be the leading international jurisdiction for child and youth health but it is only achievable through all jurisdictions working together on national goals with common health indicators for success.

We have tremendous potential to succeed when it comes to child and youth health. In fact, Canadian health organizations including the Canadian Medical Association, the Canadian Paediatric Society and the College of Family Physicians of Canada, have already articulated a five-year goal: to make Canada one of the top five nations with the healthiest children.<sup>12</sup>

This goal is completely achievable. But it requires all health care professionals, NGOs, parents, and provinces and territories to be focused and committed to the goal of improving child and youth health.

This means moving away from a focus on process, to a focus on outcomes.

It means that we must work together. All levels of government in Canada need to be working towards the same, empirically-proven child and youth health goals utilizing common indicators. These goals and indicators should be linked to the pillars of injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness. Canadian governments, organizations and industries must work collectively – focused on the same specific health indicators – to deliver direct improvements in the health outcomes of our children and youth. Only in this way can Canada become the world's best – the benchmark country other countries wish to emulate.

## Federal, Provincial, Territorial (F/P/T) Collaboration on National Indicators

In 2000, F/P/T jurisdictions recognized the importance of providing, in a consistent and comparable way, health and health system information from across Canada, using nationally collected data. In September 2002, all 14 jurisdictions released reports on 67 comparable health indicators.

The February 2003 First Ministers Accord on Health Care Renewal (The Accord), directed Health Ministers to further develop indicators to supplement the work on comparable indicator reporting. The Accord focused indicator development and reporting activities on several specific program and service areas, including primary care and homecare services. Each jurisdiction released its report publicly in November 2004.

The table on page 18 provides the web links for each jurisdiction's report.

While the list of indicators is becoming more complete with each iteration of the jurisdictional reports, there is no specific mandate to ensure that there are specific indicators that relate to child and youth health, even though there are a number that could be considered as such.

It is recommended that all levels of government and organizations reach consensus on a separate section of national indicators for children and youth health, consistent with Canada's national comparable indicator reporting by December 2009. This will allow for the development and measurement of pan-Canadian goals for child and youth health.

#### **SUMMARY OF RECOMMENDATIONS**

 It is recommended that all levels of government and organizations reach consensus on a separate section of national indicators for children and youth health, consistent with Canada's national comparable indicator reporting by December 2009. This will allow for the development and measurement of pan-Canadian goals for child and youth health.

GOVERNMENT	HEALTH INDICATOR REPORTS
Government of Canada	http://www.hc-sc.gc.ca/hcs-sss/pubs/system-regime/2004-fed-comp-indicat/index_e.html
British Columbia	http://www.healthservices.gov.bc.ca/library/publications/year/2004/pirc_2004.pdf
Alberta	http://www.health.gov.ab.ca/public/in_message.html
Saskatchewan	http://www.health.gov.sk.ca/health-indicators-report2002
Manitoba	http://www.gov.mb.ca/health/documents/pirc2004.pdf
Ontario	http://www.health.gov.on.ca/english/public/pub/ministry_reports/pirc_04/pirc_04.pdf
Quebec	http://msssa4.msss.gouv.qc.ca/fr/document/publication.nsf/ 4b1768b3f849519c852568fd0061480d?OpenView
New Brunswick	http://www.gnb.ca/0391/pdf/HEALTHPerformanceIndicators2004-e.pdf
Nova Scotia	http://www.gov.ns.ca/health/downloads/measure-health.pdf
Prince Edward Island	http://www.gov.pe.ca/photos/original/peindicators.pdf
Newfoundland and Labrador	http://www.health.gov.nl.ca/health/publications/pdfiles/healthscope_report_2004.pdf
Yukon	http://www.hss.gov.yk.ca/downloads/pirc_health_report.pdf
Northwest Territories	http://www.hlthss.gov.nt.ca/pdf/reports/health_care_system/2004/english/report_to _residents_of_the_nwt_on_comparable_health_and_health_system_indicators.pdf
Nunavut	http://www.gov.nu.ca/hsssite/PIRCenglishlow.pdf



3

## Methodology: Nation-Wide Consultation and Literature Review

"The analysis that contributed to this Report was rigorous and was supported by a nation-wide consultation with parents, children and youth and an extensive review of the existing literature related to the health and wellness of children and youth."

## **Methodology:** Nation-Wide Consultation and Literature Review

From March 2007 to July 31<sup>st</sup> 2007, parents, children, organizations, paediatric and adolescent experts, as well as industry and world class researchers were solicited for their views on the health and wellness of Canadian children and youth. Their input was gathered through provincial and territorial roundtables, meetings with experts, organizations and industry, an online quantitative survey, and a detailed literature review which sought both existing learning within the Canadian context, and international benchmarks and best practices.

## PROVINCIAL AND TERRITORIAL ROUNDTABLES

The extensive pan-Canadian consultation that informed this report involved **meetings** with over 750 groups and individuals over a five-month period to gain insight into what is currently working, what is not working, and what new policies and programs could be developed to strengthen child and youth health in Canada. Roundtables were held in each province and territory, at which interested

organizations came together to discuss child and youth health issues. Discussions with parents, children, youth, researchers, non-governmental organizations, paediatric health care professionals and institutions, and provincial and territorial governments were organized. **Over five hundred written submissions were received** through these processes, drawing attention to every facet of health and health care for children and youth.

#### **ONLINE QUANTITATIVE SURVEY**

An online public consultation process was available to provide an opportunity for people who were not able to attend roundtable sessions – and for other interested Canadians – to provide input and perspective. The online survey was posted on the Health Canada website<sup>13</sup>. The survey questionnaire consisted of 15 questions and was available to respondents in both English and French. The survey was online from June 19 to June 29, 2007, and was completed by 7.270 individuals.

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### **Health Care Pillars**

- 1. Injury prevention and safety
- 2. Obesity and healthy lifestyles
- Mental health and chronic illness



## MEETINGS WITH EXPERTS, ORGANIZATIONS AND INDUSTRY

Additional meetings were conducted both in person and by teleconference with groups unable to participate during the roundtable process. In addition, organizations made submissions which were reviewed and informed this Report.

#### LITERATURE REVIEW

Background research was conducted through an extensive literature review that included over five hundred documents related to child and youth health issues. Items reviewed included:

- Canadian Parliamentary and Legislative Reports;
- · Reports of the Canadian Auditor General;
- International Best Practices;
- Health Canada Estimates:
- Published literature in the field of child and youth health;
- Submissions from health care organizations, NGOs, community groups, and the general public; and,

 Information provided by Health Canada and the Public Health Agency of Canada, including evaluation reports provided on most programs.

#### **CORE PRINCIPLES**

Four principles were developed to serve as a guide to focus the recommendations of this Report, and to help shape future decision-making and actions related to improving the health of our children and youth. These four core principles are:

- That parents are the **primary influencers** on child and youth health and ways
   must be found to support and incent
   them to act on their child's behalf;
- 2. That **prevention** must be a primary focus;
- 3. That we should leverage what exists; it is not necessary to reinvent the wheel and recreate existing work; and,
- 4. That urgency is critical **the time to** act is now!





#### **HEALTH CARE PILLARS**

To improve the health and wellness of Canadian children and youth, a number of policies, initiatives, and programs have been recommended in this Report. The basis of these recommendations can be traced back to three fundamental pillars:

- Injury prevention and safety
- Obesity and healthy lifestyles
- Mental health and chronic illness

These pillars and principles should be the primary focus of the federal government's child and youth health programs and policy development. Future performance evaluations should indicate how well policies and programs meet and strengthen these pillars and principles for children and youth.

Each existing Health Canada and Public Health Agency of Canada initiative was reviewed and evaluated based on existing evaluation structures. Unfortunately, economic and performance evaluations, as well as value for money analyses were **not** available for many programs. The restricted time frame of this effort did not allow for independent evaluations to occur.



# 4

# Listening to Canadians: What Canadians Said About Child and Youth Health

"Over the course of the consultations for this Report, there was a very consistent and determined chorus from parents of all ethnic, cultural, and socio-economic backgrounds. They urged focus and action on what they saw to be the three most important issues impacting the health of children and youth: injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness."

## **Listening to Canadians:** What Canadians Said About Child and Youth Health

#### **BACKGROUND**

Throughout this consultation, a number of issues were consistently raised by parents, children, young people, health professionals, industry, and NGOs. It is their direct input that led to the prioritization of the three child and youth health issues of injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness. Further, it is their call for innovative solutions that has resulted in the recommendation for national strategies to address them.<sup>14</sup>

WHAT CANADIANS SAID

## The Critical Importance of Injury Prevention, Obesity and Mental Health

Over the course of the consultations for this Report, there was a very consistent and determined chorus from parents of all ethnic, cultural, and socio-economic backgrounds. They urged **focus and action** on what they saw to be the three most important issues impacting the health of Canadian children and youth: injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness.

For this reason, many of the recommendations that are made in this Report are designed to speak directly to these three issues.

Cutting across these three pillars were two other important issues that merit mention, and that are central to the work undertaken by Health Canada and the Public Health Agency of Canada. These are:

- Aboriginal Health Issues; and,
- Paediatric Research and Surveillance.

In each of these areas, recommendations are made that, if implemented, could significantly strengthen the opportunity for Canadian children and youth to live healthier lives with less risk of illness and preventable injuries.

#### **CHALLENGES AND ISSUES**

The Health Portfolio is made up of Health Canada, the Public Health Agency of Canada, the Canadian Institutes of Health Research, Assisted Human Reproduction Canada, the Hazardous Materials Information Review Commission, and the Patented Medicines Prices Review Board. This Report focuses on branches within Health Canada and the Public Health Agency of Canada relating to child and youth health. It also includes comments on









activities of the Canadian Institutes of Health Research that involve child and youth health.

For the purposes of this Report, the focus was primarily limited to five branches and three agencies of Health Canada. Whether it be consumer safety of health products within the Health Products and Food Branch, the Paediatric Surgery Wait Time Strategy in the Health Policy Branch, the Canadian Dental Program with the Chief Dental Officer or the numerous programs provided by the First Nations and Inuit Health Branch, the breadth and depth of child and youth health issues are significant.

The Public Health Agency of Canada delivers numerous programs impacting child health with a focus on prevention, and programs for First Nations and Inuit children and youth off reserve.

While there are a number of branches of Health Canada and units at the Public Health Agency of Canada with child and youth components, there are few programs that are specifically focused on achieving the health outcomes that parents, children, and youth prioritized during the consultation process. In addition, the Canadian public has very little awareness of the programs that Health Canada and the Public Health Agency of Canada implement. This was demonstrated through the comments and recommendations received during the

consultation process, a number of which are provided in this Report.

Finally, the Canadian Institutes of Health Research (CIHR) has a single institute specifically dedicated to research regarding children and youth. In addition, there are a number of other projects spread throughout the other research institutes that touch on the lives of children and youth.

## ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

With respect to the existing programs at Health Canada and the Public Health Agency of Canada, many issues were raised during public consultations and through the online survey. The substantive issues of concern are summarized in the following six points:

- Need for a "Whole of Government" Approach
- 2. Elimination of Duplication
- 3. Dissemination of Best Practices
- 4. Stable, Multi-Year Funding
- 5. Meaningful Evaluation process
- 6. Treasury Board of Canada Processes



## 1. THE NEED FOR A "WHOLE OF GOVERNMENT" APPROACH

Child and youth issues span numerous departments of government at the federal level, and numerous ministries within provincial and territorial governments. It is challenging to deal with child health issues within a silo. One cannot treat children effectively without taking into account all of the factors that influence them. In relation to this, one cannot fully meet the outcomes required to achieve the improved health of children and youth within a fractured and un-integrated system.

The Government of Manitoba provides a best practice, using a "whole government" approach to dealing with children and youth issues. In Manitoba, a Cabinet committee and committee of Deputy Ministers have been established, encompassing multiple ministries to focus, in totality, on the health issues affecting children and youth. These committees have had a significant and positive impact in influencing the programming and policies the Manitoba government has implemented.<sup>15</sup>

A less complicated way to access federal, cross-departmental funding is needed. Currently, the system is far too complicated and piecemeal, even when one only considers programs, and grants and contributions available at the federal level. A coordinated approach must prevail between and among departments, thus allowing people who are providing programs for children to focus more on program delivery and less time on administration. In addition, it will decrease duplication, freeing up human resources to provide more robust services for children and youth.

#### 2. ELIMINATION OF DUPLICATION

Currently, Health Canada and the Public Health Agency of Canada's expenditures relating to programs and services for children and youth are largely targeted at vulnerable populations, rather than the entire child and youth demographic. While there is some interaction and overlap between the programs, they are mainly autonomous with separate funding, staff, and performance measurement targets. This results in program duplication both internally and across government departments. It is confusing to stakeholder groups who are unclear which departments have the ability to make decisions and authorize action.

There are several programs being duplicated both within and across the different branches and agencies of Health Canada, the Public Health Agency of Canada, and other departments and agencies within the federal government.

While each existing program would have been created with the best of intentions, over time, an inefficient and overlapping set of programs has developed that fails to use scarce dollars as effectively as possible. As a result, federal programs are not impacting on the health and wellness of Canadian children to the level they should be.

## Don't Do What Others Are Doing Well Already

Programs that do not specifically address the child and youth health priorities emphasized by parents and experts – injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness – should not continue; the funding should be reinvested into expanding child and youth health programs that do meet these targeted health goals. **Health Canada and the Public Health** 



Agency of Canada should withhold creating new programs where there are existing P/T or NGO programs with best practices that could be implemented on a national scale.

There are numerous examples of program duplication within and across Health Canada, the Public Health Agency of Canada, and other departments of the federal government involving programs focusing on child and youth health. There is an opportunity to **consolidate the management** of these programs and thereby reduce administrative costs, freeing up more funds that can be directly invested back into child and youth health programs and allowing the government to help more kids.

While there are important roles the federal government can play in helping children and youth achieve better health status, there are also programs and areas in which the federal government should simply not be involved.

Thus, it is recommended that across the health portfolio an assessment of existing health programs that serve children and youth be completed to identify duplicate programs, and consolidate their management. For those few programs that are inter-departmental, central administration consolidation into a single department should be implemented.

#### 3. DISSEMINATION OF BEST PRACTICES

Currently, the dissemination of best practices across the country is not focused and disciplined. We need more efficient and effective mechanisms to successfully communicate and transfer best practices. The federal government has a role to fulfill in developing this network of collaboration, and in generating and disseminating best practices.

#### 4. STABLE, MULTI-YEAR FUNDING

One of the frustrations heard time and time again during the consultations for this Report was related to the inefficiency of program funding disbursement from government. Often, funds allocated in a spring budget were not available to the people implementing local programs until November or December of the same year, with an expectation that all funds be spent only a few months later by March 31<sup>st</sup> – the end of the fiscal year. The challenges associated with this 'funding crunch' are well documented in the report submitted by the Government of Canada's independent Blue Ribbon Panel on Grants and Contributions. They include:

- 1. Difficulty in maintaining human and capital resources;
- 2. An inability to plan multi-year programs; and,
- 3. An inability to contribute efficiently to the sustainability and growth of the capacity of a community.

It is clear that the current system works **for no one**. It is critical that organizations receiving government support be funded on a more timely basis, early in the fiscal cycle. Adjustments **must** be made in the existing budgeting and governmental processes in order to guarantee this occurs. The current one-year funding model where funds arrive greater than six months into the year is unacceptable. With respect to the dissemination of funds, it is recommended that a specific annual timeline be produced and enforced for distributing funding grants among child and youth health programs and initiatives.

Programs that have demonstrated appropriate due diligence and planning should be awarded three-year funding envelopes, thereby allowing them to develop and implement sustainable programs – provided those programs and initiatives are proven to be accountable and responsible. In addition, this funding should start flowing within one month of the budget approval.

#### 5. MEANINGFUL EVALUATION PROCESS

During the consultation process, issues were repeatedly raised regarding program evaluations.

First, there is a need for a higher degree of rigour focused on appropriate health outcomes in the evaluation of existing programs at Health Canada and the Public Health Agency of Canada.

Second, the current evaluation processes are frequently irrelevant or inappropriate for the program being evaluated.

Third, the local individuals responsible for conducting the performance evaluations on their programs find them to be extremely time-consuming. A number of people indicated that up to 20% of their time was consumed by completing evaluation forms and administration – time that could be used providing direct services to children.

In order to achieve world benchmarks related to health outcomes, appropriate evaluations are required. However, the process of evaluation itself must be efficient, effective, and measure the right things.

## 6. TREASURY BOARD OF CANADA PROCESSES

In evaluating all government departments, the Treasury Board of Canada has performance measures it uses to assess progress against the government's programs and initiatives. In child and youth health programs, **the current performance measures are** *process* **outcomes.** For example, specific performance measures for child health programs include the number of participants in programs by program types and the percentage of communities with programs. These measures do not ensure that the health of our children and youth will improve over time, which fundamentally, is what these programs are meant to achieve.

If we wish to achieve specific health outcomes for children and youth, all mechanisms of government must measure the same items using consistent methodologies. Hence, just as the evaluation processes for each program need to be focused on health outcomes utilizing specific health indicators, the Treasury Board of Canada should also focus on measurements related to results, not process.

It is recommended that for the next business planning cycle, Health Canada and the Public Health Agency of Canada present Treasury Board with specific health outcomes to be utilized as performance measures for child and youth programming rather than process-based outcomes. These health outcomes may include, but are not limited to a "zero tolerance" policy for childhood injuries, a decrease in the obesity rate of children and youth to 5% by 2015, a 50% reduction in the youth suicide rate by 2015, and a decrease in the infant mortality rate to two deaths per 1,000 live births by 2015.



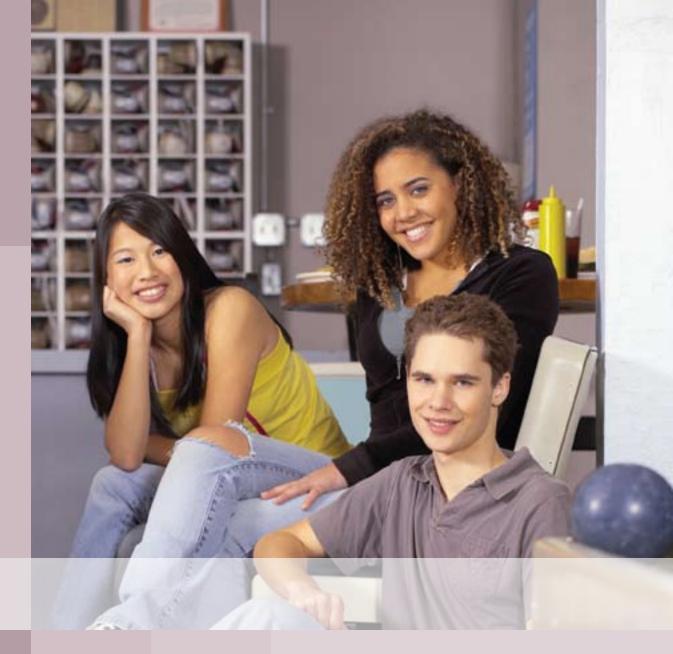
### CONCLUSION

The feedback from the national consultations was clear; Canadian parents want the efficient and effective delivery of health programs for their children and youth - no matter who is responsible for delivering the services. By making sure that health programs and services for children and youth delivered by the federal government are actually addressing the priority areas articulated by Canadian parents, guaranteeing these programs receive government support in a timely and efficient manner, and ensuring that there are proper and appropriate performance measures in place that are enforced, the Government of Canada can ensure that our children and youth have a greater opportunity for healthier lives.

#### **SUMMARY OF RECOMMENDATIONS**

- It is recommended that across the health portfolio an assessment of existing health programs that serve children and youth be completed to identify duplicate programs, and consolidate their management. For those few programs that are inter-departmental, central administration consolidation into a single department should be implemented.
- It is recommended that a specific annual timeline be produced and enforced for distributing funding grants among child and youth health programs and initiatives – provided those programs and initiatives are proven to be accountable and responsible.
- Programs that have demonstrated appropriate due diligence and planning should be awarded three-year funding envelopes, thereby allowing them to develop and implement sustainable programs. In addition, this funding should start flowing within one month of the budget approval.

- It is recommended that for the next business planning cycle, Health Canada and the Public Health Agency of Canada present Treasury Board with specific health outcomes to be utilized as performance measures for child and youth programming rather than process-based outcomes.
  - These health outcomes may include, but are not limited to a "zero tolerance" policy for childhood injury, a decrease in the obesity rate of children and youth to 5% by 2015, a 50% reduction in the youth suicide rate by 2015, and a decrease in the infant mortality rate to two deaths per 1,000 live births by 2015.



5

### The Role of Federal Government in Child and Youth Health: Health Canada

and the Public Health Agency of Canada Functioning within a Broader Context Influencing Child and Youth Health

"The Government of Canada has a meaningful role to play to help make Canadian children and youth healthier."

The Role of Federal Government in Child and Youth Health: Health Canada and the Public Health Agency of Canada Functioning within a Broader Context Influencing Child and Youth Health

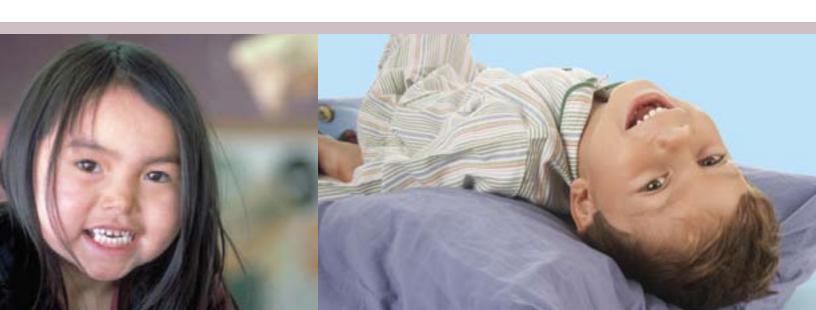
### **BACKGROUND**

Federal programs that impact and monitor the health of Canadian children and youth are largely contained within Health Canada and the Public Health Agency of Canada. There is no precise branch at either Health Canada or the Public Health Agency of Canada that is specifically responsible for child and youth health issues; rather, these issues are addressed by broader programs, many of which primarily serve adults. While there are programs at other departments that influence child and youth health, including the Department of Indian and Northern Affairs, Human Resources and Social Development Canada, the Department of Canadian Heritage (Sport Canada), the Department of Justice, Environment Canada, the Department of Public Works and Government Services (amongst others), the review of existing federal government programs contained in this Report, unless specifically noted, only includes departments under the purview of the federal Minister of Health.

Throughout this Report, references are made to the Canadian Institutes of Health Research (CIHR), the Canadian Institute for Health Information (CIHI), and Statistics Canada (StatsCan) as all three institutions work with Health Canada, the Public Health Agency of Canada, and third-party organizations on child and youth health research, data collection, and surveillance programs.

The 2007 federal Budget recommended strategic reviews of all departments over the next four years. At the portfolio level, the Honourable Tony Clement, Minister of Health, has initiated changes to the strategic planning processes of Health Canada and the Public Health Agency of Canada, including the launch of a strategic plan by the Public Health Agency of Canada and a cross portfolio review of departmental and policy processes. Given the suggestion to undertake strategic reviews in Budget 2007, this Report should be incorporated and used within the context of that process.







#### **HOW WE ARRIVED AT WHERE WE ARE**

For decades, the federal, provincial and territorial (F/P/T) governments have worked – each in their own way – to facilitate the delivery of high-quality health prevention and health care services for our children and youth. While each jurisdiction has its own role to play, there is much program collaboration between F/P/T jurisdictions on priority areas.

Currently, the role of the federal government in health care is largely to provide transfer payments to provincial and territorial jurisdictions, allowing them to provide health services. However, the federal government is also directly involved in:

- Direct health care delivery to specific groups of Canadians;
- Health research;
- · Health prevention programs; and,
- Consumer and public safety.

These programs and services are delivered through Health Canada, the Public Health Agency of Canada, federal research institutes, and an increasing number of national bodies established to undertake specific tasks to drive health system reform (including CIHI and the Canadian Patient Safety Institute (CPSI)).

### WHAT CANADIANS SAID

During the national consultations for this Report, governments, organizations parents told us that the Government of Canada has a meaningful role to play in helping to make Canadian children and youth healthier. While the provinces and territories have the primary responsibility for the delivery of health programs and services, Canadians feel that the Government of Canada has an opportunity to provide national leadership, encourage national collaboration and ensure national standards are established. It is only through this national collaboration and cooperation among all levels of government that we can be confident that our children and youth will receive outstanding health care - no matter where in Canada they live.



"As much as the provinces are responsible for Health, as a country, we need federal standards."

We heard from Canadians that they would like the federal government to focus on the following eight areas:

- 1. Leadership
- 2. Social Marketing and Public Awareness to Communicate Healthy Behaviours and Actions
- 3. Empowering and Incenting Parents
- 4. Foster Collaboration and Networking
- 5. Developing National Standards, Indicators, and Benchmarks
- 6. Conducting and Supporting
  Research Then Moving it 'From
  the Bench to the Bedside'
- 7. Data Collection and Dissemination
- 8. Take Action and Focus on Outcomes

#### 1. LEADERSHIP

Parents, children, and youth told us the federal government has a responsibility to provide national leadership and set the strategic direction and goals for the health of our children and youth. The Government of Canada should especially focus on injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illnesses afflicting children and youth.

# 2. SOCIAL MARKETING AND PUBLIC AWARENESS TO COMMUNICATE HEALTHY BEHAVIOURS AND ACTIONS

Social marketing has played an important role in encouraging healthy behaviours. Parents and organizations that are primarily involved with children recognized the substantive impact that large social marketing and public awareness campaigns have had on educating and influencing the behaviour and attitudes of children and youth. Numerous examples were cited including smoking, and littering where social marketing has had a real impact on child and youth behaviour.

Parents believe it is the role of the federal government, working with the provinces and territories, industry, and NGOs to undertake meaningful and targeted social marketing campaigns. Recommendations for marketing and public education, in particular in obesity and injury prevention, were brought forward over the course of the consultations.

### 3. EMPOWERING AND INCENTING PARENTS

Providing parents with the tools to help their children, and incenting them and their children to adopt healthier behaviours, were important themes.

Parents know that they are the best people to provide advice and direction to their children regarding healthy activities. However, they need the tools to help their children engage in healthy and safe behaviours.

### 4. FOSTER COLLABORATION AND NETWORKING

We are extremely fortunate in Canada to have world-class researchers, NGOs that are global leaders in child programming, provincial and territorial governments that are setting best practice standards internationally, and parents who are engaged in the lives of their children. Creating opportunities for these groups to collaborate can lead to significant change.

Seeking new opportunities to involve industry and NGOs in more meaningful ways was mentioned during the public consultations in every province and territory. There is a



huge opportunity for Health Canada and the Public Health Agency of Canada to involve and **leverage** the knowledge, infrastructure and human resource base of industry leaders and large NGOs such as the YMCA, the Boys & Girls Clubs of Canada, and the United Way. Health Canada and the Public Health Agency of Canada need to be more proactive and play a leadership role in encouraging and facilitating the involvement of industry and NGOs in key health priority areas for children and youth.

Currently, Health Canada and the Public Health Agency of Canada do not have a mechanism which allows them to incorporate industry and NGO initiatives and ideas which support child and youth health into the policies and best practices led by the Government of Canada. It is recommended that an Industry and NGO Liaison Advisory Group be established at Health Canada and the Public Health Agency of Canada within 6 months of this Report. This Advisory Group would provide advice and direction to the Minister of Health, the Deputy Minister of Health, and the Chief Public Health Officer on how industry, private sector companies, and NGOs can best be integrated with federal government initiatives designed to impact the health of Canadian children and youth.

### 5. DEVELOPING NATIONAL STANDARDS, INDICATORS, AND BENCHMARKS

By taking an "indicators-and-outcomes" based approach to managing child and youth health, we can focus resources and attention more strategically. Canada must seek to achieve and surpass the current world benchmarks. By setting the bar high, and striving to be the best, we will achieve far better results as a society in improving child and youth health.

Within the sphere of child and youth health, there is a need to consistently track specific indicators related to obesity, injury prevention, mental health, and chronic diseases. The proper tracking of indicators in these fields will help shape policy directions and allow for the continuous improvement of program design and implementation.

Health Canada and the Public Health Agency of Canada can show leadership by helping to establish national standards, developing common indicators, and establishing benchmarks to be achieved in priority areas of child and youth health.

# 6. CONDUCTING AND SUPPORTING RESEARCH – THEN MOVING IT 'FROM THE BENCH TO THE BEDSIDE'

Conducting successful and meaningful large research projects is a challenge that requires significant time, effort, and resources. Leaders at paediatric institutions, parents, and NGOs from across the country stated that large research endeavours should be supported by the federal government. In addition, they were quite specific on where research should be targeted: primarily in the area of **knowledge transfer and translational research**. Research that is directly relevant to "kids on the playground" will ultimately make the strongest impact on improving health outcomes.

Individuals that contributed to the consultation process stated that the people involved in delivering care or providing substantive services to children and youth need evidence-based information that can yield tangible improvements to programs and policies affecting children and youth today!

Evidence-based best practices can be used and shared to improve children's lives; however, substantive, high quality research is required to inform these best practices. Currently, Statistics Canada is working with the HECSB to advance best practice research, including biomonitoring studies of Canadians aged 6-75 through the Canadian Health Measures Survey. Canada has the professional talent to be a world leader in this kind of research.

#### 7. DATA COLLECTION AND DISSEMINATION

Parents, researchers, and organizations stated that the federal government should play a meaningful role in, and be responsible for, **data collection** – and more importantly the timely dissemination of health-related data. Researchers, clinicians, and NGOs desperately seek clear, comparable data, which when acted upon, will have a positive impact on the daily lives of children and youth.

### 8. TAKE ACTION AND FOCUS ON OUTCOMES

Throughout the consultation process, individuals involved in the local implementation of programs commented on the need to place more emphasis on 'doing', rather than studying and then re-studying issues without actually implementing solutions or applying translational knowledge that will improve health outcomes in children and youth. Going forward, implementation and service delivery need to be prioritized.

The online survey conducted to inform this Report suggested that Canadians want the Federal Government to be actively involved in helping improve health outcomes for children and youth. There is widespread agreement from respondents (82%) that Health Canada

and the Public Health Agency of Canada should establish ways to better coordinate and address child and youth health issues.

The overall focus of these child and youth initiatives needs to shift so that the health promotion and protection programs being delivered have **specific** child and youth health outcomes components. These programs should be designed specifically for child and youth populations, be evidence-based and have measurement tools that ensure they can be appropriately evaluated. Finally, they must be measured and accountable in a way that is health outcome performance-based, rather than process-based. Thus, it is recommended that rigorous performance-based indicators and outcome measures be introduced into all child and youth program evaluations within the next business planning cycle, including timely reporting on how well Health Canada and the Public Health Agency of Canada programs and services are improving health outcomes in their target populations. It is also recommended that the Public Health Agency of Canada and Health Canada withhold creating new programs where there are existing P/T or NGO programs, and instead facilitate P/T and NGO best practices that could be implemented on a national scale.

Our emphasis must shift from measuring efforts and process to measuring the outcomes and results our efforts yield.

"As much as the provinces are responsible for health, as a country, we need national standards."



### I. HEALTH CANADA<sup>17</sup>

### i. Health Policy Branch (HPB)

The Health Policy Branch of Health Canada is responsible for new policy development and implementation in key areas of government initiatives. It is significantly involved in two policy areas that can have a substantial impact on health outcomes in children and youth: paediatric surgical wait times and health human resources.

#### A. PAEDIATRIC SURGICAL WAIT TIMES

One of the major policy platform initiatives of the Government of Canada in 2006 was the establishment of Wait Time Guarantees. A wait time pilot project has been established in paediatric surgery. This national program, announced on January 11<sup>th</sup>, 2007, is a fifteenmonth pilot project that involves nation wide data collection and a measurement of the burden of wait times for children and youth requiring surgery.

Specific First Nations and Inuit wait time initiatives have also been announced including wait time guarantees in prenatal screening, and diabetic screening in several regions of Canada.

The focus of these initiatives was acknowledged by Canadian parents and paediatric experts at the roundtables as important for meeting the need for more timely access to care. They emphasized the need for continued focus in this area. The Government of Canada should be commended for targeting their first pan-Canadian initiative to children and youth health needs, and for recognizing the need to address children and youth health concerns in the wait time strategy.

#### **B. HEALTH HUMAN RESOURCES**

The Health Policy Branch is also responsible for policy development with respect to future human resources within the health care field.

While Health Canada has already supported a number of initiatives to address the growing concern around access to health care professionals, the scarcity of child and youth professional resources in numerous clinical areas was highlighted time and time again during our national consultations. These needs were not only recognized to be among sub-specialized paediatric health care providers, but also in the fields of research and community programs. Consistently, across the country, the following areas of health human resource needs were specifically highlighted:

- Child and youth psychiatrists, psychologists and ancillary mental health services;
- Clinicians and researchers specializing in obesity; and,
- Clinicians and researchers specialized in injury prevention.

The consultations also noted the need for recreational programmers and coaches for both able-bodied and disabled children to lead community sports and recreation programs.

This is a substantive problem. As articulated directly by organizations, parents and kids themselves, Canada does not have the human resources to provide appropriate support, education screening, diagnosis and treatment for children at all steps along the continuum of these health issues.

Thus, it is recommended that the Health Human Resource Strategies Division:

- Collect data to immediately evaluate current individuals trained within priority areas; and,
- Collaborate with the Royal College of Physicians and Surgeons of Canada, the Canadian Paediatric Society, and NGOs, among others, to determine if resources are available for the training of an increased number of individuals in these fields.

Once this data collection is completed and evaluated, the Health Human Resource Strategies Division should work with NGOs and professional associations to stimulate entry into these areas. This may require the development of sub-specialized programs, or other incentives to encourage individuals to enter into these fields.

#### C. AUTISM SPECTRUM DISORDERS

There are a number of other critical areas where the federal government has expanded its current activities to have a stronger impact on the health outcomes of Canadian children and youth, including autism spectrum disorders.

On November 21<sup>st</sup>, 2006, the federal government announced a package of five federal initiatives to improve knowledge surveillance and research in autism spectrum disorders (ASD).

Work on ASD is also being done by the Senate Standing Committee on Social Affairs, Science and Technology who are looking at how individuals with ASD and their families can be best supported. The government should be commended for taking these first steps with regards to the management

of this chronic disease. However, action on these recommendations needs to occur to aid families.

Autism Spectrum Disorder (ASD) affects individuals of all ages and from all walks of life, as well as their families, friends and caregivers. It can be characterized along a spectrum, with symptoms ranging from mild to severe and often including repetitive behaviour and difficulties with social interaction and communication. International studies suggest that autism affects six out of every 1,000 children.<sup>18</sup>

### ii. Healthy Environments and Consumer Safety Branch (HECSB)

### A. TOBACCO/TOBACCO CONTROL PROGRAM

Health Canada has surveillance and public reporting mechanisms in place to keep Canadians informed about reducing the prevalence of smoking among our youth. The Canadian Tobacco Use Monitoring Survey (CTUMS) is an excellent surveillance tool and has specific indicators and public reporting mechanisms for youth smoking rates. <sup>19, 20</sup> Its most recent study found a significant decrease in the smoking rate among youth aged 15-19 years over the past 12 months with 15% of youth (about 320,000 teens) reporting smoking in 2006, down from 18% for the same period the previous year. <sup>21</sup>

These statistics show that progress is being made. However, during our consultations, concern was raised repeatedly about children under 15 smoking and having access to tobacco. More information is required about this age group in order to target them more



effectively. It is recommended that Health Canada continue to support the National Tobacco Youth Strategy and expand to collect data on children and youth 11-15 years old.

#### B. ALCOHOL

Health Canada estimates that 4 to 5 million Canadians engage in high risk drinking, which is linked to motor vehicle accidents, FASD, chronic health issues, family problems, crime and violence.<sup>22</sup> There are excellent programs and information campaigns that have been developed by academic research institutes and NGOs with regard to alcohol addiction in youth.

While there is no need for the federal government to duplicate these efforts, there is a role that Health Canada can play in promoting national best practices and facilitating collaboration. For example, the Centre for Addictions and Mental Health in Ontario has created a series of brochures targeted at helping children and youth speak to parents who are drinking too much.23 The Alberta Alcohol and Drug Abuse Commission (AADAC) has created "Substance Use Prevention in the Classroom", a suggested curriculum document that provides guidelines for teachers and recommended outcomes for each grade level (K-12). AADAC's recommended outcomes provide tangible guidelines for teachers about information and effective strategies for preventing problems with alcohol, tobacco, other drugs, and gambling. AADAC has also put together a best practice review for adolescent substance use treatment.24 All of these tools are excellent and they could be adapted to become national best practices. By facilitating networking and collaboration, Health Canada can better ensure all Canadian children and youth benefit from these materials.

#### C. ADDICTIONS

The area of addictions (tobacco, alcohol, drugs) is one that speaks directly to the healthy lifestyle pillar. A number of provinces are already conducting extensive surveillance activities in this area including the Alberta Youth Experience Survey (TAYES)<sup>25</sup> and the BC Pilot Alcohol and Other Drug Monitoring Project.<sup>26</sup>

From a treatment perspective, while Health Canada should not be involved in any direct service delivery, it should continue to work with the provincial and territorial governments, as well as NGOs and professional organizations, to facilitate collaboration of national best practices in this area.

It should be noted that numerous local programs are currently funded through the Tobacco Control Strategy, the Anti-Drug Strategy, and the Controlled Substances Programme. However, it is very difficult to determine whether these programs are having an impact due to the evaluation processes used. **The impact of these programs must be evaluated against specific targets.** In this way, Health Canada can determine in which of these programs it should be investing to achieve better health outcomes. In addition, national standards and goals must be determined for these programs such that all programs strive for the highest standards.

### iii. First Nations and Inuit Health Branch: First Nations, Métis, and Inuit Health

Providing our First Nations, Métis and Inuit children and youth with accessible, timely and high-quality health care continues to challenge us. An astounding 84% of First Nation and Inuit youth are overweight or obese compared to the Canadian average of 26%. The suicide rate among Inuit youth is among the highest in the world. The prevalence of preventable injuries is three times higher for children living on reserves than off. All of these challenges – if not addressed – will result in serious, chronic diseases in adulthood for these children if action is not taken today.

In 1962, Health Canada provided direct health services to First Nations people on reserves and Inuit in the North. By the mid 1980s, Health Canada began to work with First Nations and Inuit communities to create systems that delivered more localized health services, with local control.

More recently, two significant steps have been taken by Health Canada in the area of First Nations and Inuit health. First, the tripartite agreement the federal government has established with the British Columbia First Nations Leadership Council (FNLC) and the Province of British Columbia, contracts the Government of British Columbia to provide health care services, on behalf of the federal government, to First Nations populations. Second, the Honourable Tony Clement, Minister of Health, and Phil Fontaine, the National Chief of the Assembly of First Nations, signed a joint work plan developed by a newly formed Task Group that aims to improve the effectiveness of the First Nations health system over the short and long-terms. Both of these initiatives signal a new direction in the relationship between First Nations, provincial, and federal governments; a relationship that will contribute to improving the health outcomes among First Nations children and youth.

### WHAT CANADIANS SAID

The difficult truth is that the health outcomes among Canadian First Nation and Inuit children and youth are appalling. These children lag behind on almost all health indicators compared to the Canadian average.

For the purposes of this Report, Aboriginal children and youth refer to all First Nations, Inuit and Métis children and youth, unless otherwise stated.

The primary issues that were presented during this evaluation and consultative process were thus not surprising:

- Social determinants of health play a substantive role in the overall health of Aboriginal children and youth;
- The suicide rate among First Nations and Inuit youth are among the highest in the world; and,
- Obesity and type 2 diabetes are at epidemic proportions in First Nations and Inuit children and youth.

Several of these issues are currently being addressed by the Government of Canada at Health Canada, the Public Health Agency of Canada, Indian and Northern Affairs, and HRSDC, but expedient action is essential to address these serious health problems.



### **Indicators**

We cannot create different "playing fields" among our children and youth; they must achieve the same health outcomes. However, the variance between where we are today and our desired health outcomes is far greater for First Nations, Métis, and Inuit children and youth.

The indicators present troubling statistics:

- The suicide rate among Aboriginal youth is 2 to 6 times that of the overall Canadian population;<sup>27</sup>
- Injuries are the biggest contributor to premature death among First Nation children on reserve; the rate of death from injury is four times greater for Aboriginal infants. Among preschoolers, the rate is five times greater then the Canadian average;<sup>28</sup>
- 91% of Aboriginal children are affected by dental decay with children averaging 7.8 decayed teeth by the age of six;<sup>29</sup>
- Over half (55.2%) of First Nations children on reserve are either overweight (22.3%) or obese (36.2%);<sup>30</sup>
- Some of the first cases of childhood type 2 diabetes observed were in Aboriginal communities;<sup>31</sup> and,
- SIDS is the leading cause of death amongst Aboriginal babies in Canada at a rate
   2.5 times higher than the national average.<sup>32</sup>

Given the current health outcome gaps between Aboriginal children and youth and the rest of the Canadian population, health performance indicators that should specifically be monitored among these children include:

- Infant mortality rates;
- Type 1 and 2 diabetes rates;
- Tuberculosis rates;
- First Nation and Inuit youth suicide rates; and,
- First Nations and Inuit children under six (on and off reserve) receiving hearing, dental and vision screening.

The First Nations' Regional Longitudinal Health Survey (RHS)<sup>33</sup> is a First Nations administered nation-wide health survey. It collects information based on both Western and traditional native understandings of health and well-being. It is an excellent best-practice example of a surveillance tool that is specific to a particular population, tracking among other focus areas, information about child and youth health outcomes. The health indicators listed above should be incorporated into future RHS and comparable surveys if they are not already collected.

There are a number of social determinants of health including poverty, housing and education that seriously affect the health of First Nations, Métis, and Inuit children and youth. They are chronic and challenging issues to address, but are beyond the scope of this Report.

### **Existing Programs and Initiatives**

## 1. OVERLAP AND CONFUSION IN THE MULTIPLE DEPARTMENTAL DELIVERY MODEL

Currently, First Nations and Inuit health and health-related programs for children and youth are administered by three federal departments – Health Canada, the Department of Indian and Northern Affairs and Human Resources and Social Development Canada – and one federal agency – the Public Health Agency of Canada. To make processes more complex, the First Nations and Inuit Health Branch at Health Canada delivers programs *on* reserve, while the Public Health Agency of Canada is responsible for health programs *off* reserve. Some, but not all programs and services are available both on- and off-reserve, creating either duplication or scarcity of resources.

Thus, it is recommended that a single department or agency have responsibility for Inuit and First Nations child and youth health programs. A single window strategy should be immediately developed in consultation with First Nations and Inuit groups to consolidate the administration of federal programs. The savings from streamlining administration must be reinvested into the programs themselves to increase the number of children and youth receiving the benefits from these programs.

#### 2. TUBERCULOSIS

Canada is currently experiencing a tuberculosis (TB) epidemic in our northern aboriginal communities. This is almost unprecedented world-wide in this quarter century. Rates of tuberculosis in northern communities are four times the national average and the number of infections are increasing. The spread of TB is being exacerbated by poor living conditions, poor nutrition, and poverty.



# REPORTED NEW ACTIVE AND RELAPSED TUBERCULOSIS CASES AND INCIDENCE RATE PER 100,000 – CANADA AND PROVINCES/TERRITORIES: 1995-2005<sup>34</sup>

Year of diagnosis		CANADA	Province/territory												
			Nfld. Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon	N.W.T.	Nun.
1995	Cases	1,964	11	1	13	8	380	800	108	155	126	308	2	52	-
	Rate	6.7	1.9	0.7	1.4	1.1	5.3	7.3	9.6	15.3	4.6	8.2	6.6	78.3	-
1996	Cases	1,877	24	3	15	15	332	780	97	113	140	316	6	36	-
	Rate	6.3	4.3	2.2	1.6	2.0	4.6	7.0	8.6	11.1	5.0	8.2	19.1	53.4	-
1997	Cases	1,995	15	5	7	7	360	780	96	121	166	405	2	31	-
	Rate	6.7	2.7	3.7	8.0	0.9	4.9	6.9	8.4	11.9	5.9	10.3	6.3	45.9	-
1998	Cases	1,809	8	2	18	9	289	742	116	98	158	329	2	38	-
	Rate	6.0	1.5	1.5	1.9	1.2	4.0	6.5	10.2	9.6	5.4	8.3	6.4	56.6	-
1999	Cases	1,820	12	2	15	15	314	698	132	116	149	328	1	23	15
	Rate	6.0	2.2	1.5	1.6	2.0	4.3	6.1	11.6	11.4	5.0	8.2	3.2	56.6	55.9
2000	Cases	1,723	10	2	3	10	318	700	98	104	133	285	3	10	47
	Rate	5.6	1.9	1.5	0.3	1.3	4.3	6.0	8.5	10.3	4.4	7.1	9.9	24.7	174.5
2001	Cases	1,770	19	3	8	10	259	699	115	114	116	379	-	8	40
	Rate	5.7	3.6	2.2	0.9	1.3	3.5	5.9	10.0	11.4	3.8	9.3	-	19.6	142.2
2002	Cases	1,664	9	1	9	11	282	716	98	89	128	290	-	4	27
	Rate	5.3	1.7	0.7	1.0	1.5	3.8	5.9	8.5	8.9	4.1	7.0	-	9.8	93.4
2003	Cases	1,628	6	3	6	12	255	693	127	91	110	305	1	12	7
	Rate	5.1	1.2	2.2	0.6	1.6	3.4	5.7	10.9	9.2	3.5	7.3	3.3	28.4	24.0
2004	Cases *	1,613	7	1	8	10	219	700	144	70	109	299	4	10	32
	Rate	5.0	1.4	0.7	0.9	1.3	2.9	5.6	12.3	7.0	3.4	7.1	13.0	23.3	107.8
2005	Cases *	1,616	6	1	6	5	256	623	114	139	146	264	3	8	45
	Rate	5.0	1.2	0.7	0.6	0.7	3.4	5.0	9.7	14.0	4.5	6.2	9.7	18.6	150.0

<sup>\*</sup> Cases and rates for 2005 are provisional until publication of the Tuberculosis in Canada – 2005 Annual Report.

While it is a disease that has been dormant for a number of years, many children in Northern communities are currently being diagnosed with active TB, with the disease reaching epidemic proportions some communities. As active tuberculosis is contagious, it is recommended that surveillance and treatment programs be funded and implemented to ensure that all Canadian children and vouth at risk of exposure for TB are tested and treated by public health nurses, so that this TB epidemic is stopped before further spread is encountered.

#### 3. ABORIGINAL HEAD START

Aboriginal Head Start (AHS) in Urban and Northern Communities is an early childhood development program for First Nations, Inuit, and Métis children and their families. The program, run by Health Canada for children on reserve serves 9,173 children on reserve in 398 communities across Canada. The Public Health Agency of Canada administers the Aboriginal Head Start program for children and youth off reserve, serving 4,500 children at 130 sites, which represents about 10% of 3 to 5 year old aboriginal children living in urban centres.

AHS projects provide half-day preschool experiences that prepare Aboriginal children for school by meeting their spiritual, emotional, intellectual and physical needs. All projects provide programming in six core areas:

- 1. Education and school readiness
- 2. Aboriginal culture and language
- 3. Parental involvement
- 4. Health promotion
- 5. Nutrition
- 6. Social support

Aboriginal Head Start is an excellent example of a program that is having a meaningful impact on early childhood development. There are a set number of goals and a clear mandate for the program. The program is meeting these goals and its mandate.<sup>35</sup> In addition, through its education and health components, it is playing a meaningful role in the management of chronic disease, promotion of healthy lifestyles and reduction of injury prevention for First Nations and Inuit children and youth.



### **BEST PRACTICE**

Aboriginal Head Start in the Northwest Territories

A best practice Aboriginal Head Start program is the one being delivered in partnership with the Government of the Northwest Territories. Currently eight sites are established and have adopted a principal of continuous improvement. Through real, measurable indicators, they are benchmarking themselves against other, high performing international Head Start programs. As a result, the children involved in these programs are getting better Grade 1 scores and better scores in Grades 3-5 on testing. The Government of the Northwest Territories, through their annual early childhood development report, has reported these successes in early childhood education against the previously established indicators. These annual reports are excellent and should be used as a framework for other jurisdictions. In addition, their strong evaluation methodology should be adopted by other Head Start programs.

The success of Aboriginal Head Start programs has been proven repeatedly.<sup>36</sup> Children involved in Aboriginal Head Start programs had a grade repeat rate of 11.6% as compared to 18.7% for children who did not, among other positive benefits.<sup>37</sup> These programs need to reach even more children if we are to affect health outcomes. Currently the program reaches 18% of First Nations and Inuit children and youth. **It is recommended that the Aboriginal Head Start** 

Program be expanded with the goal of up to 25% of *on* and *off reserve* children having access to the program within five years.

AHS is one of the programs, as mentioned earlier in this Report, that is administered by multiple departments and agencies. Accessing existing funding is challenging for a number of organizations. As recommended by the "Many Voices, Common Cause: A Report on the Aboriginal Leadership Forum on Early Childhood Development," the process to access funding should be streamlined so that there is "one stop shopping" for funding sources that is easily accessible and clearly defined.<sup>38</sup> These funding sources should be available through a single department so that less time is spent filling out proposal documents and more is spent on direct service delivery.

#### 4. INUIT HEALTH

In April 2007, Canada's Minister of Health, the Honourable Tony Clement, and Mary Simon, President of Inuit Tapiriit Kanatami (ITK), agreed to a joint workplan developed by a newly-formed Health Canada/ITK Task Group that aims to improve Inuit health. The Task Group will explore and develop approaches in areas of mutual interest for improving Inuit health including:

- Implementing an Office of Inuit Health at Health Canada to better address Inuit specific health issues;
- Enhancing cross-jurisdictional collaboration;
- Improving the quality of and access to health services; and,
- Exploring approaches for strengthening Inuit data sharing and infrastructure, information and research through partnerships at the regional and national levels.

This was a positive and proactive step towards jointly setting and achieving clear targets in priority areas that can best improve Inuit health, including the health of Inuit children and youth.

#### 5. INUIT AND FIRST NATIONS SUICIDES

Suicide and self-injury were the leading causes of death for youth and adults up to age 24 years in First Nations and Inuit young people. In 2000, suicide accounted for 22% of all deaths in youth (aged 10 to 19 years) and 16% of all deaths in early adulthood (aged 20 to 44 years). **Even more staggering is that 83% of Inuit youth deaths are suicide.** 

Currently, no clear data exists that provides meaningful direction for the types of programs that will reduce youth suicides. Many suicides stem from chronic illness or disease, while others are from unhealthy lifestyles. Health Canada and the Public Health Agency of Canada can play meaningful roles in collecting data, establishing surveillance of behaviours and environmental influences, and facilitating collaborations and knowledge translation in this field to grow the body of knowledge that can be used to deal with these issues.

The National Inuit Youth Suicide Prevention Framework at Health Canada has taken the first steps towards a comprehensive strategy. But more must be done to find ways of helping Inuit youth deal with issues that lead to suicide. It is recommended that Health Canada partner with local Inuit leaders, like the Embrace Life Council, and provide these leaders with tools to create innovative, local solutions that are better tailored to help Inuit youth.

As referred to in the mental health section of this Report, research in the area of youth suicide prevention, and the evaluation of existing programs in this area are required.

### 6. FETAL ALCOHOL SPECTRUM DISORDER (FASD)

Fetal Alcohol Spectrum Disorder (FASD formerly referred to as Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effects (FAE)) is a constellation of birth defects in newborn children caused by the consumption of alcohol by mothers during pregnancy. FASD is a nation-wide health concern. It does not discriminate on the basis of race. socioeconomic status or sex. Because of the lack of recognition and diagnosis, it is difficult to be certain how many individuals have FASD. Current statistics speculate that one baby out of 500 to 3000 annual live births will have FASD. The incidence of FASD is greater than the incidence of either Down's Syndrome or Spina Bifida.

The incidence of FAE is 5 to 10 times higher than the incidence of FAS. Thus, each year in Canada, somewhere between 123 - 740 babies are born with FAS, and around 1000 babies are born with FAE (based on 370,000 births per year). Overall, the prevalence of FASD in First Nations and Inuit communities may be as high as one in five children.<sup>39</sup>

The First Nations and Inuit component of the FASD initiative has focused on supporting local education and promotion programs, as well as training for front-line workers.<sup>40</sup> A report on this program has been published and the recommendations are being implemented.

Many local community groups have already established excellent best practices. The incidence and prevalence of the disease speak to the substantive impact that it is having on First Nations and Inuit communities. It is recommended that these programs be evaluated going forward utilizing strict health outcomes in order to monitor effectiveness. These indicators should include



the incidence of FASD in neonates at the time of birth, the incidence of FASD children identified at school entry, and a correlation of the incidence of these children based on the FASD programming provided in their local area. Program changes should then be implemented that are evidence-based best practices.

#### 7. BRIGHTER FUTURES

The purpose of the Brighter Futures program is multifold. It includes working to improve the quality of, and access to, culturally appropriate holistic community services directed at mental health, child development, and injury prevention. Brighter Futures is a universal program that reaches every First Nations and Inuit community in Canada, to varying levels. During the consultation process for this Report, there were many similarities noted between this program and other Health Canada and Public Health Agency of Canada programs. In addition, a lack of consistency of purpose among programs was noted. Thus, it is recommended that the Brighter Futures program be amalgamated with the other existing programs focused on injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness. This would eliminate duplication and streamline funding for those local organizations that wish to build their organizations and reach more children in their local communities.

#### 8. INJURY PREVENTION

The goal of First Nation and Inuit injury prevention activities are to promote and support culturally sensitive community initiatives that prevent injury and promote safe environments for First Nation and Inuit children. Preventable injuries are five times more prevalent on reserve than among the average Canadian child and youth population. These numbers are staggering

and concerning.

It is recommended that these activities be amalgamated into a National Injury Prevention Initiative for Canadian Children and Youth. Specifically, a First Nations and Inuit component must be a focal point of this national initiative. Rigorous data collection and evaluation of previous injury prevention activities must be conducted such that best practices and policies from this initiative are able to be implemented in Northern and remote regions **immediately**.

#### **New Initiatives**

In addition to the current Health Canada and the Public Health Agency of Canada programs that provide focus on First Nations and Inuit children and youth, there are three other initiatives that, if adopted, will positively impact their health outcomes.

- Aboriginal Children and Youth Health Strategy
- 2. Jordan's Principle
- 3. Ancillary Health Services

"Aboriginal children and youth are a particularly vulnerable population and I think it is important to ensure that they get the best possible start in life."

### 1. ABORIGINAL CHILDREN AND YOUTH HEALTH STRATEGY

Working with Aboriginal communities, provinces and territories, Health Canada and the Public Health Agency of Canada should begin to develop a specific Aboriginal Children and Youth Health Strategy as recommended by the Canadian Medical Association, Canadian Paediatric Society, and the College of Physicians and Surgeon of Canada.

This strategy would recognize the challenges of culture and geography facing these children and youth, and would be based on these equally important, interdependent principles:<sup>41</sup>

- Self-determination: allowing communities to define the issues and develop culturally appropriate solutions;
- Intergenerational focus: looking to the past and the future, involving elders and youth in the solutions;
- Non-discrimination: ensuring equitable access;
- Respect for culture, language, and identity;
- Holism: integrating the emotional, physical, cognitive and spiritual needs of children and youth; and,
- Shared responsibility: linking the best of Aboriginal and non-Aboriginal systems to achieve improved health outcomes.

This task should be among the top priorities of Health Canada and the Public Health Agency of Canada.

#### 2. JORDAN'S PRINCIPLE

No discussion of enhancements and additions to the health services of First Nations and Inuit children and youth can be made without comment on the issue of Jordan's Principle.

Jordan was a First Nations child born with complex medical needs. His family did not have access to the supports needed to care for him at their home on reserve, Jordan remained in hospital for the first two years of his life as his medical condition stabilized.

Shortly after Jordan's second birthday, doctors said he could go to a family home. But the federal and provincial governments could not agree upon which department (and which level of government) would pay for Jordan's at-home care. The jurisdictional dispute would last over two years during which time Jordan remained unnecessarily in hospital. Shortly after Jordan's fourth birthday, the jurisdictional dispute was settled. However, Jordan passed away before he could live in a family home.

It is recommended that provincial and territorial governments adopt a "child first" principle when resolving jurisdictional disputes involving the care of First Nations children and youth on reserve.<sup>42</sup>

When a jurisdictional dispute arises between two levels of government regarding payment for health care services for a child with Indian status which are otherwise available to other Canadian children, the federal government would pay first, and then recover appropriate costs through health transfer payment adjustments with the provinces the following year. Using this approach, children and youth



will receive care first, and jurisdictional disputes will be resolved later, not interfering with child health care when its needed.

#### 3. ANCILLARY HEALTH SERVICES

There are challenges in ensuring that First Nations and Inuit children on reserve with disabilities have access to appropriate ancillary health services such as occupational, physical, and speech therapies. Currently, there is a fragmented approach within the Government of Canada in the provision of these services. While Health Canada supports programs classed broadly as health-related for children from birth up to six years old, Indian and Northern Affairs Canada is more closely aligned with providing support for children ages six to eighteen years old.

As outlined in the disability section of this Report, maintaining and enhancing physical and intellectual capabilities through the use of occupational, physical and speech therapies can substantially enhance these children's independence over the long-term. Health Canada should make efforts to provide these ancillary services close to the home of First Nations and Inuit children under age 6 living on reserve.

Opportunities include:

• Providing additional assistance to the "First Nations and Inuit Home and Community Care program", to include ancillary health services for special needs children under age six on reserve. The First Nations and Inuit Home and Community Care program already provides services for 1,300 people on reserve. A pilot program to be implemented in the next 12 months, is recommended which would focus on the delivery of ancillary

- services including, occupational, physical, and speech therapy that would allow children under age six with lifelong complex medical needs to receive the medical services they require at home, instead of at medical foster homes or medical institutions.<sup>43</sup>
- **Providing paediatric clinical and health** services in the North. Similar to the Australian program, where paediatricians, nurses, speech pathologists, and other ancillary care providers offer clinical and ancillary services to remote locations on an outreach clinic basis, this program - provided on a timely basis - could benefit First Nations and Inuit children, in addition to **all** children living in remote Northern parts of the country. This program would require the development of a dedicated team, to service these communities in Northern Canada. It would help Health Canada decrease the capital and institutionalized services provided, and replace them with more timely and appropriate care for children and youth.

### II. PUBLIC HEALTH AGENCY OF CANADA<sup>44</sup>

### **BACKGROUND**

The Public Health Agency of Canada was created in 2004 with the specific mandate to protect the health and safety of Canadians of all ages. The Public Health Agency of Canada, led by the Chief Public Health Office who reports directly to the federal Minister of Health, is mandated to work closely with provinces and territories to keep Canadians healthy and help reduce pressures on the health care system.

The Public Health Agency of Canada delivers a number of programs that focus on children and youth including:

- Canadian Health Network Children
- Centres of Excellence for Children's Well-being
- Community Action Program for Children
- Child Maltreatment, Abuse and Neglect
- Healthy Pregnancy and Infancy (including Canada's Prenatal Nutrition Program and Fetal Alcohol Spectrum Disorder)
- Injury Prevention
- Immunizations, including the National Immunization Strategy
- Mental Health
- Physical Activity Guides for Children and Youth

Many Public Health Agency of Canada programs are supported by specific child and youth surveillance programs and studies including:

- Canadian Incidence Study of Reported Child Abuse and Neglect - Major Findings - 2003;
- Canadian Childhood Cancer Surveillance and Control Program (CCCSCP);
- Canadian Perinatal Surveillance System (CPSS);
- Canadian Congenital Anomalies Surveillance Network (CCASN);
- · Injury Surveillance Online;
- CHIRPP (Canadian Hospitals Injury Reporting and Prevention Program) database (1999); and,
- Centre for Health Promotion Health Surveillance and Epidemiology Division: Maternal and Infant Health Section.

### i. Centres of Excellence for Children's Well-Being

The vision of the Centres of Excellence for Children's Well-Being (COE) is to improve Canadians' understanding of, and responsiveness to, the physical and mental health needs of children and the critical factors for healthy child development. Currently COEs exist for:

- Early Childhood Development;
- Children and Adolescents with Special Needs;
- Youth Engagement; and,
- Child Welfare.

There are some excellent activities occurring at these COEs. However, if the existing COEs are going to be true Centres of Excellence, they need to be internationally ground-breaking. Throughout the consultation process, it was concerning that very few researchers, clinicians, and more importantly parents, knew of the existence of these Centres of Excellence. They need to produce world-class materials and research, and most importantly meet the needs of Canadian parents, children, and youth.



In order to achieve and meet these expectations, the existing COEs must undergo an appropriate transformation.

### TRANSFORMING THE CENTRES OF EXCELLENCE

- 1. Focus on Priority Issues
- 2. Stronger Relationships with NGOs and Industry Partners
- 3. Focus on World Benchmarks
- 4. Social Marketing
- 5. Establish Health Indicators
- 6. Renamed the Centres of Excellence for Child and Youth Health

First, there needs to be a more appropriate focus on the priority issues that parents, organizations, children and youth identified through the consultations including:

- Injury prevention and safety;
- · Obesity and healthy lifestyles; and,
- Mental Health.

Transition into these key areas should take place while transitioning out of existing COEs. COE National Expert Advisory Committee members should change their focus to become reflective of these new priorities.

Second, the Centres of Excellence must develop stronger relationships with NGOs and industry partners to leverage the research and knowledge they have established and the knowledge other organizations have acquired. Knowledge sharing and dissemination is key. NGOs and industry partners will also be helpful in terms of determining whether the ideas generated are actually implementable on the ground.

Third, the COEs should focus their efforts on achieving world benchmarks so Canada becomes the world leader.

Fourth, the National Expert Advisory Committee of the COEs should be given the responsibility for communications, public education, youth engagement, advertising, and awareness-building for all of the COEs. A centralized social marketing strategy is desperately needed. A key learning from the implementation of the National Tobacco Strategy was that communications, advertising, education, and promotion are extremely important components to knowledge dissemination and the improvement of health outcomes. Educating kids and parents is important.

Fifth, COEs should be intimately involved in the establishment of appropriate health indicators in their fields. As experts in research and knowledge translation, they will be well equipped to provide direction on the appropriate health indicators that will provide data for improving health outcomes among Canadian children and youth.

**Sixth, the COEs should be renamed "Centres of Excellence for Child and Youth Health."** This is an important step in refocusing the COEs. These organizations need to highlight the important differences between the various stages of development, each focusing on specific and distinct child and youth health issues.

### ii. Canada Prenatal Nutrition Program (CPNP)

The CPNP aims to reduce the incidence of unhealthy birth weights and improve the health of both infant and mother, decreasing the possibility of infant mortality. This program includes services such as food

supplementation, nutritional counselling, support, education, referral, and counselling on health and lifestyle issues. CPNP services are developed and delivered in partnership with the provinces and territories, and through joint management agreements with First Nations and Inuit communities. Currently, 50,000 women and infants in over 2,000 communities in Canada are receiving support through the CPNP provided by the Public Health Agency of Canada, while an additional 9,000 First Nations and Inuit women from over 600 communities participate through CPNP projects established through the First Nations and Inuit Health Branch at Health Canada.

### **BEST PRACTICE**

**Programs** 

The Dispensaire Dietetique de Montreal/ Montreal Diet Dispensary has created a number of outstanding programs making it a best practice example of a CPNP program. Their programs include a recommended food basket based on Canada's Food Guide and provides suggestions on budgeting for basic needs (including specific examples for different family sizes, family compositions and income levels) and the Higgins Nutrition Intervention Method in which nutrition intervention is individualized and cost-effective. It has a strong impact on helping mothers have normal birth weight babies and better health outcomes for infants and children. Additional information can be found at: http://www.ddm-mdd.org/.

The CPNP plays a key role in helping many woman and their children attain healthy lifestyles. However, there are often barriers people locally implementing programs. It is therefore recommended that the administrative requirements of organizations applying for CPNP funding be streamlined and coordinated so that organizations applying for funding from several government bodies do not have to provide the same information in multiple formats, wasting time and staff energy that should be devoted to direct service delivery. This should involve collaboration between F/P/T iurisdictions to create standardized, template forms for cross-jurisdictional use.

Due to the important impact this program has on child development, it is recommended that the Public Health Agency of Canada ensure that the community programs selected and delivered through the CPNP support its specific mandate, and have specific health targets and deliverables to be achieved. While performance measurement is a requirement of the funding agreement, there is little auditing of CPNP programs to ensure that measures actually deliver health outcome results. Thus, it is recommended that the Public Health Agency of Canada review all performance measurements in CPNP agreements to ensure that they meet the health outcomes set out in their mandate.

In addition, it is recommended that a single department/agency of government provide this program in conjunction with the Community Action Program for Children (CAPC). The combined service delivery of these programs will allow more children to be reached, more efficiently. It is recommended the combined program be operated by the Public Health Agency of Canada given their



**experience in these programs.** The efficiency of these programs should be reviewed by the Public Health Agency of Canada as part of this reorganization.

Through the evaluation process it was found that CPNP programs being provided by Health Canada and the Public Health Agency of Canada were being administrated at different levels of efficiency. Due to this, it is recommended that the best practices from each program be reviewed such that the most effective and efficient administrative practices can be implemented, resulting in more children receiving services.

### iii. Community Action Program for Children (CAPC)

Along with the Canada Prenatal Nutrition Program, CAPC is one of the Public Health Agency of Canada's core programs designed to improve the health outcomes and the well-being of vulnerable children and youth. CAPC and CPNP are both granting bodies that provide funding to community groups or coalitions to deliver programs that address the health and development of at-risk children ages six and under. Overall, 450 community projects are currently funded across the country under these two programs.

During the public consultation process several issues were raised by both individuals and organizations who implement CAPC as well as recipients of CAPC programs. Many parents stated they did not know the main goal of CAPC programs as there is no consistent focus to the programs across the country: the program has no consistent pan-Canadian goals or mandate. This results in evaluations that are challenging to implement and the assessments local organizers are asked to complete are often **not** relevant to the program being implemented. More importantly, local

CAPC programs are often not focused on the articulated priorities of Canadian parents and youth. A 2001 evaluation concurs stating that parents were clear in their priorities for newborns to five-year olds:

- · Nutrition;
- Accidents and Injuries; and,
- Product Safety.

They were also clear in what they saw to be major issues affecting children aged 6 - 12:

- Lack of Physical Activity;
- · Obesity; and,
- Injuries.

These areas should be the focus of CAPC.

It is recommended that CAPC programs work towards improving health outcomes of children and youth that are key priorities for Canadian parents. Existing CAPC programs should be provided with an opportunity to transition to these three priority health areas and set performance benchmarks in these areas. This should occur within three years. If they are unable to do so, these programs should end at the completion of the transition period.

As previously noted, the CAPC program should be combined with the CPNP. The current recipients of funds from both programs find that their amalgamation into one program creates a greater whole. In addition, program administration would be easier as there would be a consolidation of the evaluations required for these programs. This would substantially decrease the administrative burden on the providers, and contribute to a wider range of services available per parent and child as well as reaching a greater number of children.

Finally, CAPC and CPNP programs need to develop industry partnerships for central buying and increased bargaining power for this nation-wide program. Partnerships with industry will allow these programs to expand the number of children they reach.

### BEST PRACTICE

for CAPC Program

Jurisdictional Integration:

The Government of Nova Scotia has templates for bilateral agreements and a process for determining 'who does what', so that duplication is eliminated. This should be emulated across the country.

### iv. Joint Consortium for School Health

The Joint Consortium for School Health<sup>45</sup> facilitates a comprehensive approach to school health by working with both the health and education sectors to create tools that assist the development of programs, policies, and practices that can improve the overall health of children and youth while at school.

As this organization was only established in 2006, it is still in its early years. There is significant potential in this program which could provide an opportunity for synergies with the Centres of Excellence programs.

It is recommended that the Joint Consortium for School Health focus its initial efforts on physical activities and nutrition within the school setting. They are encouraged to work in collaboration with the Canadian Association for Health, Physical Education, Physical Activity, and Dance to identify and evaluate best practices that can help reduce obesity.

### v. Health Promotion and Chronic Disease Prevention Branch

There are numerous programs at the Public Health Agency of Canada focused on physical activity. Whether it be Active and Safe Routes to School, Green School Grounds, On the Move, or the Physical Activity Guide for Children and Youth, all of these programs are doing excellent work to identify and build best practices that can be implemented to benefit children and youth across the country.

However, it is concerning that these activities are not dealt with in a coordinated fashion. These numerous programs should be amalgamated under the Centre of Excellence for Obesity (if this Centre of Excellence is established) to be coordinated and leveraged in a synergistic fashion thus providing the greatest possible benefit for children and youth across the country.

### vi. Child Maltreatment, Abuse and Neglect

According to the Public Health Agency of Canada Report, "Family Violence Initiatives: Performance Review 2002-2003 and 2003-2004":

- 8,460 children and youth were victims of physical or sexual assaults in 2002;
- 76% of the children assaulted knew the person who assaulted them; and,
- 25% were assaulted by a family member.<sup>46</sup>



The Public Health Agency of Canada is performing excellent surveillance and research activity in this area. Reports such as the Canadian Incidence Study (CIS) of Reported Child Abuse and Neglect examine the incidence of reported child maltreatment and the characteristics of children and families investigated by Canadian child welfare services.<sup>47</sup> It is a national school-based survey conducted in collaboration with the World Health Organization on the health attitudes and behaviours of young people, including children. This school-aged Report recommended that the indicators being measured therein be used as surveillance and performance measures across Canada. The data collected provide an excellent base for policy and program focus.

The Public Health Agency of Canada delivers some strong programs in the areas of child and youth maltreatment, abuse and neglect. The National Clearinghouse on Family Violence (NCFV) is an example of a successful initiative led by the Public Health Agency of Canada that involves 15 federal department partners and a horizontally managed mandate.<sup>48</sup> The NCFV serves as Canada's resource centre for information on violence within relationships of kinship, intimacy, dependency or trust; these services are available, free of charge, in both official languages.

Unfortunately, the rates of family-related assaults against children and youth have risen since 1998. To help reverse this trend, the Public Health Agency of Canada needs to have a more focused approach to policy and program development in this area, stemming from the excellent data the CIS collects. It must also ensure that all programs are measurable against the determined health care indicators.

### vii.Canadian Health Network

The Canadian Health Network, a partnership between the Public Health Agency of Canada, Health Canada and other health organizations is a national, bilingual health promotion program found on the Internet at <a href="https://www.canadian-health-network.ca">www.canadian-health-network.ca</a>. While it has useful information about child and youth health and links to key Canadian and international resources, it receives a relatively low amount of traffic due to low visibility.

To heighten awareness for child and youth health information, it is recommended that the information provided through the Canadian Health Network be amalgamated in one place, the Public Health Agency of Canada's website, in order to make both of these sites more effective and information retrieval more convenient for website visitors. Content should also be reviewed and updated every month as many parents and stakeholders rely on this resource for up-to-date resource materials.

#### III. RESEARCH

Throughout the consultations that informed this Report, several issues related to research, surveillance, and data management were raised.

While there is a significant amount of health care research currently taking place in Canada, there needs to be an increased focus on children and youth.

### Canadian Institutes of Health Research (CIHR)

A significant amount of the research on child and youth health issues in Canada is conducted through the Canadian Institutes of Health Research (CIHR).

CIHR's Institute of Human Development, Child and Youth Health has a number of research projects that are currently underway which will directly impact the health outcomes of Canadian children and youth. CIHR should be commended for supporting specific targeted programs which address the needs identified not only by paediatric experts, but also by parents from across the country. These include strategic initiatives in mental health wait times, child and youth health indicators, and injury prevention, all of which are of significant importance to Canadian parents.

In addition, other Institutes at CIHR have projects which focus on child and youth health including the Institutes of Aboriginal People's Health, Musculoskeletal Health and Arthritis, and Nutrition, Metabolism, and Diabetes.

### **BEST PRACTICE**

**Paediatric Research** 

The University of Prince Edward Island hosts the Comprehensive School Health Research Team. This multi-disciplinary research team includes representatives from Atlantic Canada with linkages across Canada. Its vision is to promote healthy and active youth, thereby contributing to the health and well-being of Islanders and Canadians while building training and development capacity for research. Best practice programs like this one need to be linked to the national Joint Consortium for School Health so that their work can be shared with all schools.

The numerous projects at CIHR demonstrates its commitment to child health research. However, there is room for improvement. If we believe the premise that investing early in prevention decreases disease later in life, and impacts the associated health care costs, it is incumbent upon us to invest more substantially in paediatric research. This research will provide evidence-based direction for health and health care initiatives that positively and directly impact the health outcomes of children and youth.

This does not necessarily mean continuing to fund the same types of programs and initiatives in child health research. There is a need for more than basic science research to be conducted in this field; there is an **urgent** need for clinical and community-based research to be supported.



In addition, it is imperative that there be stronger linkages between CIHR and NGOs across Canada.

### WHAT CANADIANS SAID

A number of the key issues were identified through the consultation process by paediatricians, NGOs, researchers, and parents, including:

- The need for a longitudinal cohort study on children and youth;
- That gaps in paediatric research exist and are significant; and,
- That incorporation of NGOs and community organizations in child and youth knowledge translation research is essential.

#### APPROACH TO FUTURE RESEARCH

Throughout the consultation process, Canadians emphasized the need for a consistent approach to research with respect to child and youth health research. The components of this approach were:

- Ongoing surveillance
- Evidence based
- Multi-disciplinary approach including researchers, NGOs and industry
- Knowledge translation
- Networking and connectivity

By ensuring that these components are integrated into each research project, Health Canada and the Public Health Agency of Canada can ensure that the research conducted on child and youth health not only conforms to rigorous research standards, but that they will be applicable to the broader child and youth health community.

Canada must begin investing in targeted surveillance and data collection in the areas relevant to the current obstacles facing our children and youth. Dissemination of the collected data to the research community, health care professionals, NGOs, and the general public must also occur in a more timely and effective manner. Until these two things occur, the Government of Canada will never be able to correlate investments in health programs with successful health outcomes in children, youth, or adults.

In particular, this means enhancing or creating surveillance and data collection in the areas of injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness.

### ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

### i. Longitudinal Cohort Study on Children and Youth

As referenced in the Environment section of this Report, it is strongly recommended that the Government of Canada support a ten year, longitudinal cohort study which encompasses the fetus at conception to children 8 years of age. This study should be commenced within the next 12 months. A minimum of ten thousand children would be followed over the course of this study that would collect data for multiple clinical and environmental evaluations. This study would provide much-needed data for determining future clinical and programmatic directions with regards to child and youth health. If the data is not available, appropriate targeting and program development cannot be completed. This information is essential to help determine optimal resource allocation, policy development, and strategic directions.

CIHR, working with Statistics Canada to collect the data, would be the preferred operator of this study, given its capacity and expertise to conduct a study of this magnitude. An **Expert Advisory Group in research and data** collection should be established to provide direction for this study. These individuals should be involved with child and youth health, with representatives with expertise on the environment and specifically allergies and immune diseases, and chronic diseases in children. In addition, representatives of NGOs that impact child and youth health should be invited to serve on the Expert Advisory Group. This Expert Advisory Group should ensure that appropriate knowledge-translational research data and results are available to more than just basic science researchers. The data and results should be made available on a timely basis to Canadian clinicians and NGOs, among others, that impact the health of Canadian children and youth on a daily basis.

In addition, this Expert Advisory Group should provide counsel and direction to Statistics Canada on child and youth health research surveys and data collection in general. The Advisory Group's advice would go beyond the longitudinal cohort study, and would provide advice and direction on other surveys that Statistics Canada fields in the future to collect data on children and youth.

### ii. Gaps in Focused Research

Ongoing child and youth health research should contribute to the core pillars of injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness.

Currently, CIHR identifies that there are gaps in child and youth research areas including the physical environment, the social environment, the growing epidemic of obesity and physical inactivity, and unintentional and intentional injury.<sup>49</sup> These

are specific child and youth health issues that have been identified by parents and health care professionals, and highlighted in earlier sections of this document that require additional research emphasis. In order to appropriately address these gaps in research and experienced personnel, the following two recommendations are made:

- The existing Public Health Agency of Canada's Centres of Excellence for Children Well-Being should transition to focus on the priorities of Canadian parents: injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness. These new Centres of Excellence will have an ability to contribute to knowledge translation research and should work with CIHR to expand this capability.
- Canada Research Chairs should be established for specific child and youth research in injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness.

# iii. Incorporation of NGOs and Community Organizations in Knowledge Translation Research

The CIHR Institute of Human Development, Child and Youth Health and the other Institutes conducting evidence-based research and evaluations in clinical and programming applications that affect the health outcomes of children and youth are to be commended. This translational research is essential. However, greater interaction between researchers, NGOs, and clinicians is required. Knowledge translation must occur between individuals conducting research and those who are implementing programs and treatments that directly affect children and youth. Only through this interaction will we be able to best leverage the immense talents across multiple sectors to the benefit of Canadian children.



In particular, CIHR should fund participatory research with NGOs and community based organizations in injury prevention, obesity and mental health.

# IV. SURVEILLANCE, DATA COLLECTION, MANAGEMENT, AND DISSEMINATION

### i. Surveillance Programs

The Centre for Health Promotion, part of the Public Health Agency of Canada, currently carries out surveillance in four areas:

- Perinatal health (maternal, fetal and infant health, including congenital anomalies) through the Canadian Perinatal Surveillance Program<sup>50</sup> and the Canadian Congenital Anomalies Surveillance Network<sup>51</sup>;
- Child Unintentional Injury, through Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP)<sup>52</sup> and associated national and international work, including injury classification collaboration with the WHO and CDC;
- Child maltreatment through the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS)<sup>53</sup>, which is a periodic (every 5 years) survey of a representative sample of child protection agencies across the country;
- Relatively rare childhood conditions of public health importance (e.g. lap belt syndrome, acute flaccid paralysis, neonatal CMV infection) through the Canadian Paediatric Surveillance Program;<sup>54</sup> a partnership between the federal government and the Canadian Paediatric Society.

In addition, there is a business plan being developed for the surveillance of autism spectrum disorders.

Other branches of the Public Health Agency of Canada conduct some surveillance activities including disease surveillance on childhood viruses and infections.

While this surveillance is a good foundation, it is recommended that support be provided to increase both the quantity and scope of paediatric surveillance activities across the country in key areas – injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness essentially among rural and ethnic populations.

### ii. Data Collection, Management, and Dissemination

Data collection and surveillance are key components in establishing trends and providing the basic building blocks of research. Data, if it is substantive, comparable, and "clean", is invaluable in the development of appropriate public policy and programs which can have a meaningful impact on the health outcomes of children and youth. It is only with appropriate and substantial data that appropriate evidence-based decisions can be made.

Improved paediatric research, surveillance, and data management are all critically important for policymakers, and the people involved with program design. Through sound, reliably-sourced data, appropriate decisions with regards to policy and program development are possible. The programs and organizations that can best implement effective programs that achieve the desired health outcomes Canadian parents seek will be identified.

### iii. Surveillance and Data Collection Through Statistics Canada

There are a number of data collection tools that have been established by Statistics Canada to monitor child and youth health outcomes including:

- The National Longitudinal Survey of Children and Youth (NLSCY) – a long-term study of Canadian children that follows their well-being and the factors affecting their development from birth to early adulthood;<sup>55</sup>
- The Aboriginal Children's Survey (ACS)

   designed to provide a picture of the early childhood development of First Nation, Inuit and Métis children under the age of six;<sup>56</sup> and,
- The Participation and Activity Limitation Survey (PALS) which collects data on the challenges facing people with disabilities, including children and youth, at home, at school, in the labour market and in the community.<sup>57</sup>

In addition, in 2010, the Health Statistics Division at Statistics Canada is planning on conducting a comprehensive survey on children's health as part of a thematic cycle of their Canadian Community Health Survey (CCHS). The CCHS is a cross-sectional survey that collects information related to health status, health care utilization, and health determinants for the Canadian population. This information will be available to future decision making on child and youth health policy and programming.

However, to maximize the value of this data, an Expert Advisory Group on paediatric data collection and research is needed. As mentioned previously, this group would add meaningful clinical and community focus to data collection and utilization.

### WHAT CANADIANS SAID

Throughout the consultative process several key issues were raised regarding data collection, management, and dissemination.

Better coordination among the national data collection agencies and large research projects associated with child and youth health is required. Throughout the consultations, four significant issues with respect to data were raised:

- 1. Access to data is tedious, and often not achievable;
- Data sets are not linked and are often not comparable;
- 3. Agencies of the Government of Canada do not facilitate access to their data (i.e. Statistics Canada); and,
- 4. Collaboration is needed and information being collected is not always what researchers and NGOs need.

Appropriate data collection and dissemination of results, ultimately, leads to better decision-making. When more reliable, high-quality data is available, better results on the front-line can be achieved.



### ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

### **DATA RECOMMENDATIONS:**

- 1. Data Access
- 2. Comparable and Linked Data Sets
- 3. Collaboration on Surveillance Programs

#### 1. DATA ACCESS

Researchers and leaders of NGOs frequently commented on the challenges they faced in accessing data that could meaningfully improve their research or programs which directly impact on the health of Canadian children and youth. To assist them, improved accessibility to large data sets must be created.

The data collected for evaluative, research, or surveillance needs must become more accessible. Although it is recognized that confidentiality issues must be appropriately respected, a mechanism must be developed that permits the sharing of data with legitimate researchers. Many other countries including Sweden, the United Kingdom, and the United States developed these mechanisms decades ago. It is concerning that due to the challenges of accessing quality data – even though Canada has excellent sources - Canadian researchers find it more fruitful to access and work with the data provided in countries other than their own. This must change so that Canadian researchers and NGOs can access Canadian data for the benefit of Canadian children and youth. It is recommended that Health Canada and the Public Health Agency of Canada work with Statistics Canada and other data collection agencies of government to develop a mechanism to facilitate access to data similar to the National Highway Traffic Safety Administration database in the United States within the next 12 months.

#### 2. COMPARABLE AND LINKED DATA SETS

Comparable data sets are essential to further excellence in research. Some participants in our consultation suggested that similar data sets from different government departments and agencies were not comparable and thus could not be linked. This creates two concerns:

- 1. There is an increased burden of data mining and cleansing for researchers; and,
- Inaccurate comparisons that might misinform decision making could be made.

Mechanisms must be created between Statistics Canada, the Canadian Institute for Health Information, Health Canada, and the Public Health Agency of Canada in order to create a basis for appropriate data comparison and linkages. To do this, a common platform simply must be developed.

That platform should acknowledge the need for improvement in the ease of accessing data, in facilitating data sharing, and the necessity for easier access to data sets for multiple research purposes

### 3. COLLABORATION ON SURVEILLANCE PROGRAMS

While it is critical to augment existing surveillance programs to ensure a child and youth focus, a collaborative format should be instituted across surveillance projects in order to maximize best practice learnings and allow program funding to be stretched even further. As organizations such as Statistics Canada and CIHR move forward with national, longitudinal studies that are focused on child and youth health issues, they should be partnering with other academic researchers and NGOs who have the same child and youth focus. This will allow additional surveillance areas within the sample to be collected so that there is no process duplication.

Surveillance programs and data management must be flexible as the obstacles and issues that children face will change. The surveillance programs of the Public Health Agency of Canada, as well as the data collection agencies of the Government of Canada must have the flexibility to re-prioritize to better incorporate those issues that are having a substantive impact on the health outcomes of Canadian children and youth. This can be accomplished through the use of the Expert Advisory Board previously mentioned for the longitudinal cohort study.

Clinicians, academic researchers and NGOs have substantive experience dealing with children and youth. By providing these individuals and organizations with comprehensive and comparable data, as well as the excellent analysis that federal government agencies can provide, an integrated team

can provide powerful information for driving policy and program changes in child and youth program areas. The federal government has a responsibility to facilitate this collaboration, encouraging all the "players" within this field to contribute towards improving the health outcomes of Canadian children and youth.

With respect to surveillance, data collection, management, and dissemination at the Public Health Agency of Canada, several issues were raised during the pan-Canadian consultations for this Report. In particular, a culture of service needs to be developed among the individuals involved with the surveillance programs. They must view their roles facilitating the research work that takes place "in the field," not "keepers" of the keys to the data.

Finally, the Public Health Agency of Canada and Health Canada surveillance programs must strive to become the authoritative source of data in their areas. If they are unable to do this, they should "get out of the business". Government organizations should not strive to be all things to all people but to provide the world's best or to support those that either are the world's best or striving to achieve this goal.



### **BEST PRACTICE**

**Highlighted Surveillance Programs** 

The McCreary Centre Society (www.mcs.bc.ca), in partnership with the Government of British Columbia and the public health system, administers and analyzes the "Adolescent Health Survey". This questionnaire is designed to gather information about youth health. The questionnaire contains questions about physical and emotional health, and factors that can influence health during adolescence. The survey provides current, accurate information about what BC youth know, think, and do about their own health and assesses how the broad determinants of health affect youth. The Centre also conducts smaller, special surveys to capture populations not in school (e.g. street kids). Not every student in BC is asked to participate; schools are randomly selected and the survey is conducted by public health nurses and trained administrators to more than 1,500 grade seven to twelve classrooms. In the most recent survey, BC youth identified their top four issues as alcohol and drug use, mental health and suicide, racism and discrimination, and sexual health.

Overall, government departments and agencies, research entities, organizations and individuals performing data collection and surveillance need to work together to ensure that:

- There is as little duplication of resources as possible;
- There is full data sharing and accessibility;
- Comparable data is collected across jurisdictions;
- Collection of the RIGHT and relevant data takes place; via a template platform for data collection; and,
- Data sets can be linked to maximize data collector's benefits.

It is only through the broad and timely dissemination of information that knowledge transfer can occur, leading to better health outcomes for children and youth, not just in Canada but world-wide.

### CONCLUSION

It is clear that Health Canada and the Public Health Agency of Canada are engaged in the delivery, and supporting the delivery, of numerous health programs across the country. In a number of areas including aboriginal health and research they have a direct role to play; in others, they need to act as a facilitator, bringing other partners to the table to share best practices and help with their adoption on a national scale.

As reflected in this section, that means that there are structural changes to be made in order to better ensure that Canadian children and youth have access to high quality, effective health services. Program efficiencies can be found in a number of areas so that scarce funds can be reinvested to ensure that more children receive the help they

need and deserve. An academic rigour needs to come to the research work that is being done, to ensure that we are, at the most basic level, capturing data on children and youth so that we can better address their issues. The Government of Canada needs to ensure that there are appropriate and relevant performance measurement standards in place to make sure that the money we are spending is actually making a difference on the health outcomes of Canadian children and youth.

It is only through this process of continual improvement that Health Canada and the Public Health Agency of Canada can work towards world leader status in child and youth health.

### SUMMARY OF RECOMMENDATIONS

- To better foster collaboration and networking, it is recommended that an Industry and NGO Liaison Advisory Group be established within 6 months of this Report. This advisory group would provide advice and direction to the Minister of Health, the Deputy Minister of Health and the Chief Public Health Officer on how industry, private sector companies and NGOs can best be integrated with federal government initiatives designed to impact the health of Canadian children and youth.
- Health Canada and the Public Health
  Agency of Canada can show leadership by
  helping to establish national standards,
  developing common indicators, and
  establishing benchmarks to be achieved.
- It is recommended that rigorous performance-based indicators and outcome measures be introduced into all child and youth program evaluations within the next business planning cycle, including timely public reporting on how well Health Canada and Public Health

- Agency of Canada programs and services are improving health outcomes in their target populations. It is also recommended that the Public Health Agency of Canada and Health Canada withhold creating new programs where there are existing P/T or NGO programs, and instead facilitate P/T and NGO best practices that could be implemented on a national scale.
- Given the current health outcome gaps between Aboriginal children and youth and the rest of the Canadian population, health performance indicators that should specifically be monitored among Aboriginal children and youth through the First Nations' Regional Longitudinal Health Survey include:
  - Infant mortality rates;
  - Type 1 and 2 diabetes rates;
  - Tuberculosis rates;
  - First Nation and Inuit youth suicide rates; and,
  - First Nations and Inuit children under six (on and off reserve) receiving hearing, dental and vision screening.
- Currently, First Nations and Inuit health and health-related programs for children and youth are administered by three federal departments – Health Canada, the Department of Indian and Northern Affairs and Human Resources and Social Development Canada – and one federal agency – the Public Health Agency of Canada. It is recommended that a single department or Agency have responsibility for Inuit and First Nations child and youth health programs.
- Canada is currently experiencing a tuberculosis (TB) epidemic in our northern, Aboriginal communities. This is almost unprecedented world-wide in this quarter century. Rates of tuberculosis in northern



communities are four times the national average and the number of infections are increasing. As active tuberculosis is contagious, it is recommended that surveillance and treatment programs be funded and implemented to ensure that all Canadian children and youth at risk of exposure for TB are tested and treated by public health nurses, such that this TB epidemic is stopped before further spread is encountered.

- It is recommended that the Aboriginal Head Start Program be expanded with the goal of up to 25% of Aboriginal children and youth having access to the program within five years.
- that reaches every First Nations and Inuit community in Canada. There are many similarities noted between these programs and other Health Canada and Public Health Agency of Canada programs. It is recommended that the Brighter Futures program be amalgamated into existing programs that focus specifically on injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness.
- It is recommended that the preventable injury activities for First Nations and Inuit children and youth be amalgamated into the recommended National Injury Prevention initiative for Canadian children and youth.
- Working with Aboriginal communities, provinces and territories, Health Canada and the Public Health Agency of Canada should begin to develop a specific Aboriginal Children and Youth Health Strategy as recommended by the Canadian Medical Association, Canadian Paediatric Society, and the College of Physicians and Surgeon of Canada.

- Consistent with Jordan's Principle, it is recommended that provincial and territorial governments adopt a "child first" principle when resolving jurisdictional disputes involving the health care of First Nations children and youth on reserve. To expedite the administration of this recommendation in cases of potential jurisdictional dispute, it is recommended that the federal government pay up front, and then recover costs through transfer payment adjustments with the provinces.
- There are challenges in ensuring that
  First Nations and Inuit children on reserve
  with disabilities have access to appropriate
  ancillary health services such as occupational,
  physical and speech therapies.
  - A pilot program is recommended which would focus on the delivery of ancillary services including occupational, physical and speech therapy that would allow children under age six with lifelong complex medical needs to receive the medical services they require at home, instead of at medical foster homes or medical institutions.
- For the Public Health Agency of Canada's Centres of Excellence for Children's Well-being to be truly groundbreaking, it is recommended that:
  - They be re-focused on injury prevention, obesity, and mental illness;
  - They develop stronger relationships with NGOs and industry partners;
  - They seek to achieving world benchmarks so Canada becomes the world leader;
  - Their National Expert Advisory Committee should be given the responsibility for communications, public education, youth engagement, advertising, and awareness-building for all COEs:

- They should be intimately involved in the establishment of appropriate health indicators in their fields; and,
- They should be re-named Centres of Excellence for Child and Youth Health.
- Regarding the Canada Prenatal Nutrition
   Program and the Canadian Action Program
   for Children, it is recommended that a
   single department of government provide
   these programs. It is also recommended
   the combined program be operated by
   the Public Health Agency of Canada given
   its experience in their program delivery.
- work towards improving health outcomes of children and youth that are key priorities for Canadian parents. Existing CAPC programs should be provided with an opportunity to transition to these core health areas after setting priorities and performance benchmarks. This should occur within three years. If they are unable to do so, they should sunset at the end of the transition period.
- It is recommended that the Joint Consortium for School Health focus its initial efforts on physical activities and nutrition within the school setting. They are encouraged to work in collaboration with the Canadian Association for Health, Physical Education, Physical Activity, and Dance to identify and evaluate best practices that can help reduce obesity.
- There are numerous programs at the Public Health Agency of Canada focused on physical activity. These numerous programs should be amalgamated under the Centre of Excellence for Child and Youth Obesity (if this Centre of Excellence is established) to allow the programs to be coordinated and leveraged in a synergistic fashion to

- provide the greatest possible benefit for children and youth across the country.
- It is recommended that the information provided through the Canadian Health Network be amalgamated in one place, the Public Health Agency of Canada's website, in order to make both of these sites more effective and information retrieval more convenient for website visitors. Content should be reviewed and updated every month as many parents and stakeholders rely on this resource for up-to-date resource materials.
- To gain a better understanding of environmental impacts on children's health, it is strongly recommended that the Government of Canada support a ten year, longitudinal cohort study which encompasses the fetus at conception to children 8 years of age. This study should be commenced within the next 12 months.
- Canada Research Chairs should be established for specific child and youth research in injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness.
- It is recommended that support be provided to significantly increase both the quantity and scope of paediatric surveillance activities across the country in key areas – injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness especially among rural and ethnic populations.
- It is recommended that Health Canada and the Public Health Agency of Canada work with Statistics Canada and other data collection agencies of government to develop a mechanism to facilitate timely access to data similar to the National Highway Traffic Safety Administration database in the United States within the next 12 months.



- A culture of service needs to be developed among the individuals involved with the surveillance programs. They must view their roles facilitating the research work that takes place "in the field," not "keepers" of the keys to the data.
- Overall, government departments and agencies, research entities, organizations and individuals performing data collection and surveillance need to work together to ensure that:
  - There is as little duplication of resources as possible;
  - There is full data sharing and accessibility;
  - Comparable data is collected across jurisdictions;
  - Collection of the RIGHT and relevant data takes place; via a template platform for data collection; and,
  - Data sets can be linked to maximize data collector's benefits.



# Injury Prevention and Safety

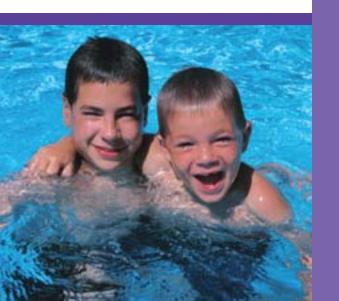
"Parents are not able to be with their children 100% of the time. They want to be as assured as possible that when their children are at school, outside playing or even in a healthcare environment, every precaution has been taken to ensure their safety."



## "I think that environmental contaminants are a huge issue

and are made even worse by poor quality food and lack of physical activity. These are areas where the federal government could make a huge difference.

**70** 



# Injury Prevention and Safety

## **Injury Prevention**

The first main theme within this Report is the reduction of unintentional injuries among children and youth. As a society, we have come a long way to help reduce the frequency and severity of injuries, yet as this chapter suggests, far more can and must be done.<sup>58</sup>

## Children, Youth, and the Environment

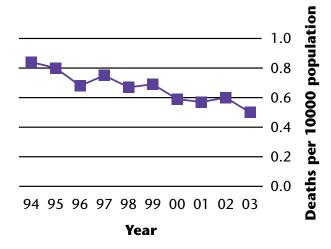
The environment – and its potential impact on the health of children and youth – is currently the subject of much discussion by governments, researchers, NGOs, and members of the general public. This remains an area of growing scientific discovery, yet there remains a lack of research that focuses specifically on environmental impacts on individuals, or the cumulative environmental impacts on children and youth. Further on in this chapter, this important subject will be explored in detail.



## I. INJURY PREVENTION

In Canada, unintentional injury remains the leading cause of death for children ages 1 to 14. In fact, injuries account for more deaths in children and youth than all other causes of death combined.<sup>59</sup> Canada ranks a shocking 22<sup>nd</sup> out of 29 OECD countries when it comes to preventable childhood injuries and deaths.

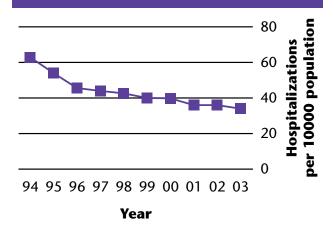
RATES OF UNINTENTIONAL INJURY
DEATHS AMONG CANADIAN CHILDREN
AGED 0-14 YEARS, 1994-2003<sup>60</sup>



Source: Statistics Canada [Deaths for 2003 were estimated from trends for the years 1994-2002]

This is staggering when one considers that injuries are largely preventable and create a significant economic burden on employers and governments. Unintentional injuries cost Canada's health care system approximately \$4.2 billion in direct system costs annually, with an additional \$4.5 billion in secondary costs.<sup>61</sup> Another \$4 billion in direct and indirect health care costs are specifically related to unintentional injuries in children and youth.<sup>62</sup>

RATES OF UNINTENTIONAL INJURY HOSPITALIZATIONS AMONG CANADIAN CHILDREN AGED 0-14 YEARS, 1994-2003<sup>63</sup>



Source: Canadian Institute for Health Information

"Prevention of injury is very important, often overlooked and should be a large focus."



Action can be taken that will reduce the risk of severe injury among Canadian children and youth; preventing many of these injuries from ever happening in the first place, or at the very least dramatically reducing their impact. Sweden, Italy, Great Britain, and the Netherlands are OECD leaders in children's safety and all have National Child and Youth Injury Prevention Strategies. In each of these countries, fewer than 10 per 100,000 children sustain preventable severe injuries each year whereas in the United States and Canada, which do not have National initiatives, the rates are four to seven times higher per year.<sup>64</sup>

"Prevention of injury is very important, often overlooked and should be a large focus."

#### WHAT CANADIANS SAID

Parents are not able to be with their children 100% of the time. We heard uniformly across the country, that they want to be as assured as possible that when their children are at school, outside playing or even in a healthcare environment, every precaution has been taken to ensure their safety. While Canada has come a long way in terms of the adoption and promotion of safety techniques and guidelines, there is still much more that can be done.

## **Injury Prevention and Safety Indicators**

Many indicators on childhood injuries are available. Canada must choose a set of indicators to monitor in this area that are comparable across institutions and organizations. For example:

- Child and family compliance (e.g. smoking, drinking, using vehicle restraints properly);
- Access to emergency services for injuries such as emergency room visits, hospitalization, and paediatric trauma services;
- Medical error rates at health care institutions; and,
- Safety helmet and safety equipment use.

## **CHALLENGES AND ISSUES**

Unfortunately, Canada's health care system continues to primarily focus on treating illness, rather than trying to prevent it. One out of every 230 Canadian children is hospitalized each year with a serious trauma, with 20 percent of these having serious head injuries. This means approximately 6,000 Canadian children sustain a major head injury, resulting in life-long disability each year. This is just the number that is reported – it is believed that five to ten times that number of children and youth actually suffer severe trauma and preventable injuries every year.

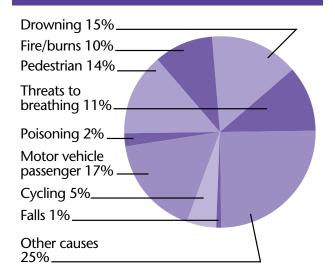
These statistics are staggering – and unacceptable, and Canada must begin to fix them.



## INJURIES THAT KILL CHILDREN MOST FREQUENTLY

There are numerous preventable injuries that, with improved health promotion, collaboration and translational research, Canada could improve on. In fact the top15 killers of kids are both surprising and largely preventable: motor vehicle crashes, choking, drowning, pedestrian injuries, falls, poisoning, fires/burns, bikes, dog bites, suffocation, baby walkers, sports injuries, guns, power windows, and toppling television.<sup>65</sup>

## MAJOR CAUSES OF UNINTENTIONAL INJURY DEATHS AMONG CANADIAN CHILDREN AGED 0-14 YEARS, 1994-2003<sup>66</sup>



Source: Statistics Canada [Deaths for 2003 were estimated from trends for the years 1994-2002]

## ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

The Government of Canada, through Health Canada and the Public Health Agency of Canada, is already delivering and supporting programs whose aim is to reduce injuries and promote safety in the food children eat, the toys they play with, and the environment they inhabit. This work is done through the Healthy Environments and Consumer Safety Branch and the Health Products and Food Branch at Health Canada and various programs at the Public Health Agency of Canada. In addition, the national consultations provided best practice examples of programs that the provinces, territories and other organizations are delivering to keep our children healthy and injury-free.

#### **New Initiatives**

The consultations for this Report elicited a number of excellent new ideas that the Government of Canada should look at adopting in order to reduce the incidence of child and youth injuries.

## A. NATIONAL INJURY PREVENTION STRATEGY

Canada currently does not have a National Injury Prevention Strategy for Children and Youth. Organizations such as SmartRisk, Safe Kids Canada, and the Canadian Child and Youth Health Coalition have recommended such a strategy be established. Health Canada and the Public Health Agency of Canada should work with the provincial and territorial governments, as well as health care experts, NGOs, and community organizations to develop and fund a 5-year national, evidence-based strategy for injury prevention in children and youth.

Key elements that should be considered for the national strategy include:

- Leadership and coordination, including the development of specific indicators, desired targets, benchmarks, and national standards
- 2. Social marketing, public promotion, advertising, and education to change parent behaviour and educate parents, children and youth
- 3. Knowledge translation research on injury prevention in children and youth that provides parents and organizations the tools to create safe environments for their children
- 4. National standards for consumer products and equipment use
- 5. Effective data collection, surveillance and information dissemination
- 6. Collaboration among key stakeholders
- 7. Incentives and support for parents

While some progress has been made in each of these areas, more action is required for Canada to become a global leader in safety and injury prevention among children and youth. The following includes recommendations in each of these areas.

#### 1. LEADERSHIP AND COORDINATION

A critical role the federal government can play is in showing leadership in efforts designed to improve the health and wellness of children and youth. Regarding the development of the National Injury Prevention Strategy specifically, the federal government can:

- Establish a mission statement for a National Injury Prevention Strategy focused on achieving international pre-eminence in childhood injuries of a "Zero Vision", striving to have no Canadian child or youth die of a preventable injury.
- Establish a framework to determine where and how to most effectively focus injury prevention efforts; and,
- Establish indicators, benchmarks, and targets to measure progress toward the achievement of the strategic mission over a five year timeframe.

## 2. SOCIAL MARKETING – EDUCATION AND SAFETY AWARENESS

Everyone is responsible for ensuring that our children and youth are educated about safety and injury prevention activities. Unfortunately, parents often don't have, or are using, outdated information to talk to their children about safety. Parents need to be better informed about resources available to them.



Numerous education initiatives in consumer product safety have been initiated at the HECS branch. These initiatives include window covering awareness, the lead risk reduction strategy, and toy safety. In addition, awareness programs, product safety programs and household chemical safety programs have been developed. There are educational programs as well as education bulletins and website items available to educate consumers. These are all excellent initiatives; however, few parents are aware of these tools and how to utilize them. Public education and promotion programs are important, and are being developed, but a better strategy to increase parental, child, and youth awareness is needed. It is recommended that a National Injury Prevention Strategy, which incorporates these initiatives with improved social marketing, be developed and implemented so that Canadian children and youth can benefit from the work already being done at the Public Health Agency of Canada and Health Canada.

Other successful education and awareness building initiatives which could be built upon include:

## A. SAFETY VILLAGES FOR SAFETY EDUCATION

One mechanism for educating parents and children are safety villages. Many safety villages are being developed across the country – all in an effort to educate children in a "real life" environment. By simulating hazardous environments that children must react to, they learn the best and safest behaviour in case a real life hazard occurs.

One outstanding example of this type of safety education is being conducted by the YMCA in London, Ontario through their Children's Safety Village.

## **BEST PRACTICE**

in Children's Safety Education

The London 'Children's Safety Village' is a miniature town, with up to 30 scaled-down buildings, roadways, traffic lights and signs, an operational railway crossing and a school bus. After classroom instruction by police, fire and other safety personnel, the children have the ability to actually demonstrate their knowledge of safety through the use of electric cars, bicycles and walking around. This program, supported by numerous corporate sponsors and the London YMCA is offered free of charge to London area students, Grade 1 to Grade 4, and is designed to demonstrate that prevention is the most affordable method of creating safe and healthy environments. More information can be found at http://www.safetyvillage.ca/.

In partnership with NGOs, and community organizations, the federal, provincial and territorial governments should support the creation of safety villages in all major urban centres in Canada and pilot a "safety farm" in a rural centre.

#### **B. BOOSTER SEATS**

Canadian parents need to become far more educated on the right car or booster seat for their child, and the proper way to install it. Every year Canadian children suffer severely debilitating injuries or die in motor vehicle accidents. Just as in the case of adults wearing seat belts, many of these severe traumas and deaths could be avoided by the use of a child booster seat. However, only 28% of children which should be restrained, due to their height and weight, actually are restrained properly when being driven in a car. Parents simply do not know the safety rules in order to protect their kids.<sup>67</sup>

The Kids that Click Program is a joint initiative of Safe Kids Canada and the Hudson's Bay Company. This excellent program includes written and online information (including a DVD) on how to properly install car and booster seats. Programs such as this should be encouraged such that every parent in Canada is educated as they leave the hospital with their newborn.

#### C. GRADUATED LICENSING

Motor vehicle collisions are the single leading cause of death and a leading cause of injury to youth.<sup>68</sup> However, the level of vehicular accidents – and associated injuries and deaths – has been shown to decrease with the use of graduated licensing.

Graduated driver licensing was introduced in a number of provinces and territories as a prevention strategy to reduce the serious public health problem of injury and death occurring from roadway collisions. Best practices should be adopted across provinces and territories from recommendations contained in the study "Best Practices for Graduated Licensing in Canada."

Canadian graduated licensing programs should require:

- Certified practice of at least 50 hours within the learner phase. An additional 10 hours should be practice driving in winter road conditions.
- A restriction on unsupervised night-time driving from 9:00 p.m. to 6:00 a.m. for probationary drivers. Exemptions could be made for travel to and from home to work or school events.
- A zero blood alcohol concentration for all drivers under 21 years of age.
- A prohibition on probationary drivers under 20 years of age from carrying teen passengers when driving unsupervised during the first 6-months to 12-months of the licensing period. Exemptions could be made for immediate family members.

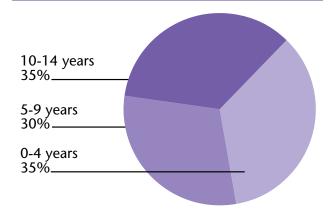
Having a consistent, best practice licensing model in Canada will reduce the number and severity of accidents involving new drivers.

#### 3. KNOWLEDGE TRANSLATION RESEARCH

As long as unintentional and intentional injuries continue to be the number one cause of death for children and youth, it is critical that additional research be done within this demographic. Currently, Canada lags behind other OECD countries in clinical expertise and research dedicated to child and youth trauma and injury prevention.

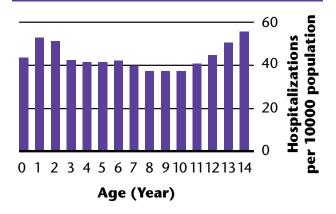


## PROPORTION OF UNINTENTIONAL INJURY DEATHS AND HOSPITALIZATIONS AMONG CANADIAN CHILDREN BY AGE GROUP (AGE ADJUSTED RATES), 1994-2003<sup>70</sup>



Sources: Canadian Institute for Health Information; Statistics Canada [Deaths for 2003 were estimated from trends for the years 1994-2002]

## RATES OF UNINTENTIONAL INJURY HOSPITALIZATIONS AMONG CANADIAN CHILDREN BY AGE, 1994-2003<sup>71</sup>



Source: Canadian Institute for Health Information

In order to tackle this important issue, the consultation process elicited two key recommendations:

- That Health Canada's Health Human Resource Strategies Division establish targeted education incentives to encourage additional clinical researchers to work in this area.
- That CIHR's Institute of Human Development, Child and Youth Research be encouraged to sponsor a knowledge translation research call for proposals in child and youth injury prevention within the next two years.

#### 4. SETTING NATIONAL STANDARDS

There are several areas where Health Canada and the Public Health Agency of Canada play a role, or could play a role in setting national standards. In some cases, legislation may be an appropriate tool for setting and enforcing these standards.

## Healthy Environments and Consumer Safety Branch (HECSB)

HECSB provides a good example of a Health Canada branch that directly addresses the dual role of promoting healthy living and protecting the health of children and youth. This branch's activities include:

- Supporting the development of safety standards and guidelines;
- Enforcing legislation by conducting investigations, inspections, seizures, recalls, and prosecutions;
- Testing and conducting research on consumer products;
- Providing importers, manufacturers, and distributors with hazard and technical information;

- Publishing product advisories, warnings, and recalls; and,
- Promoting safety and the responsible use of products.

HECSB has a strong focus on national standards, research and safety promotion - which is excellent. However, it should strengthen its specific testing requirements for products that will come into contact with children and youth. Currently, there has been substantive interest in this area due to non-compliant toys and hazardous materials available in the Canadian marketplace. Stronger regulations required that enforce industry responsibility for the evaluation of these products prior to entry to Canada, and prior to sale to Canadian parents and children. This could be aided by an evaluation of the product flow chain, identifying earlier, appropriate times to evaluate children's toys and other products before they enter the Canadian market.

#### **Consumer Products**

#### A. BOOSTER SEATS

While there are a number of areas where the Health Canada should enhance legislative and regulatory controls to reduce the risk of child and youth trauma, car crashes kill more children than anything else.72 This is especially problematic among primary schoolaged children who need to use booster seats. British Columbia, Newfoundland and Labrador and Ontario are to be commended as they have recently introduced life-saving booster seat legislation. All other provinces and territories are encouraged to implement similar legislation in the next 12 months, which would make booster seats mandatory for children aged 4-8 until they weigh 36-45 kg (80-100 lbs.) or until they are 132-145 cm (52-57 inches) in height.

#### **B. HELMET STANDARDS**

The Canadian Standards Association (CSA), has established standards for bicycle helmets. These helmets have saved children's lives and decreased the number of children with head injuries and resulting disabilities. Helmets for winter sports – including snowboarding, skiing – are needed and standards for these helmets are required. It is recommended that Health Canada work with the CSA to develop these helmet standards by December 2008 which will save childrens' lives.

## C. PLAYGROUND AND BACKYARD SAFETY

While there is a need for a larger number of playgrounds for children and youth in Canada, there is a greater need to assess current playground equipment and ensure it is safe for use, both in terms of design and equipment used for its construction. Trampolines, in particular pose a significant threat. In Canada, the CSA standard was developed to promote and encourage the provision and use of play spaces that are well-designed, wellmaintained, innovative, and challenging. It provides detailed information about materials, installation, structural integrity, surfacing, inspection, maintenance, performance requirements, access to the playground, play space layout, and specifications for each type of equipment. It is complex, voluntary, not retroactive, and there is no enforcement body. While a few provinces have legislation that requires all licensed child care facilities (excluding residential child care) to have their playgrounds inspected for compliance with the CSA standard and to develop a plan to minimize risk of injury, many do not. Ontario was the first to implement this type of legislation and currently has the strongest protection for children. Other provinces and territories are encouraged to implement similar legislation.



#### D. TOY AND CONSUMER PRODUCT SAFETY

Earlier this year, Canada's Minister of Health accepted the recommendation of the *Board* of *Review Inquiring into the Nature and Characteristics of Baby Walkers* to continue the existing ban on the advertising, sale, and importation of baby walkers. This is to be commended as the use of baby walkers has been demonstrated to show unnecessary accidents in infants.<sup>73</sup>

All Canadians should be concerned about the safety of children and youth with consumer products. In order to best protect them, the Government of Canada should enact General Safety Requirement Legislation by December 2008 that includes due diligence standards and updated standards for product safety, specifically domestic and imported toys and products that are primarily designed for children and youth. This legislation should include environmental restrictions for hazardous substances in products designed for children and youth including but not limited to lead and mercury.

The Health Canada website includes extensive information regarding safety provisions for children's products and provides up-to-date juvenile product recall information.<sup>74</sup> However, this is a growing area of concern among Canadian parents as they want to make sure the toys and sports and recreation equipment their children are using are safe. **Therefore, it is recommended that general product testing regulations be put in place by December 2008 on all children's toys, sports, and recreational equipment as suggested by Safe Kids Canada.** 

Updated safety legislation should also address a number of key issues that are core to safety and injury prevention for children and youth. Through the National Injury Prevention Strategy, an Advisory Group should be requested to review and provide recommendations on the following issues within 12 months of this Report.

- Mandatory requirements for bicycle helmet use for all Canadian children and youth;
- Recreational vehicle standards, including all-terrain vehicles, dirt bikes, snowmobiles, and mini-motorcycles, specifically reviewing age appropriate licensing and adult supervision for children and youth to obtain licences for their use:
- Winter vehicle safety standards including winter helmet and equipment use for winter activities including snowmobiles, skidoos, skiing and snowboarding;
- Building safety standards including appropriate childproofing screens, windows, window blinds, and hot water taps;
- Strengthened home safety standards for products for infants, children and youth including bunk beds, infant swings and jumpers;
- Stronger recreation safety standards for products for children and youth including playgrounds, skateboarding, parks, and especially trampolines;
- Product safety of new toys, especially magnet and motorized toys;
- Water safety standards including personal flotation devices for infants and motorized summer vehicles (e.g. boats, seadoos); and,
- A consistent, national standard for graduated licensing for adolescent drivers including addressing safety risks associated with cell phone and texting practices.

## "Baby formulas and foods must be monitored for contaminants and nutritional levels."

## **Health Products and Food Branch**

The mandate of the Health Products and Food Branch is to provide Health Canada with an integrated approach to a range of health and safety issues affecting children and youth, from food and nutrition, to drug and vaccine safety, to the safety aspects of other therapeutics and health products.

## A. OFFICE OF PAEDIATRIC INITIATIVES (OPI)

The Office of Paediatric Initiatives (OPI) within Health Canada performs excellent work targeted at improving the health and safety of children and youth. OPI is the focal point within the Health Products and Food Branch for a number of health and safety issues affecting children.

## Its mandate includes:

- Coordinating the development of paediatric information (through the regulatory system and/or other means);
- Coordinating how this information is made available and accessible;
- Raising awareness of child and youth safety issues related to health products and food; and,
- Promoting conditions to enable Canadians to make informed decisions about the health and nutrition of their children and youth.<sup>75</sup>

In order to facilitate the excellent work of the OPI, establishment of the Paediatric Expert Advisory Committee (PEAC) on health products and food is recommended. This Expert Advisory Committee would provide direction and expert, independent advice to the OPI. In addition to its previously established responsibilities, the PEAC mandate should be expanded to include:

- The development of a national, web-based formulary;
- The need for appropriate labeling of paediatric drugs; and,
- Evaluation of health products, outside of pharmaceuticals, that have a significant impact on children and youth health (i.e. medical implants).

This expanded mandate may require a review of the individuals who have been considered for appointment to the PEAC. The PEAC membership should not exceed 12 members.



## **Institutional and Pharmaceutical Safety**

The safety of children and youth in our health care institutions is an important area for discussion. The majority of adverse health events that happen to children and youth in hospitals are related to errors in ordering and dispensing medication. During the consultation process, many parents and health care providers expressed concern that **best practises and national standards** need to be established and implemented to create safe hospital environments for children and youth requiring care.

## **Improving Hospital Patient Safety**

There has been an increasing level of media and public interest in hospital patient safety. Health professionals do their best to deliver high quality healthcare, but adverse events occur in healthcare facilities across the country. Canadian governments have the opportunity to make a difference now instead of allowing more accidents to happen.

#### **B. THERAPEUTIC PRODUCTS DIRECTORATE**

The Therapeutic Products Directorate encourages the study of appropriate labeling of medicinal products in the paediatric population. Currently, 75% of children's medications are provided without appropriate paediatric labeling (termed "off labeled"). 76, 77 This is due in part to the lack of research regarding the appropriate dosing and therapeutic benefit for the paediatric population.

## DRUG UTILIZATION BY CHILDREN IN CANADA OVER A YEAR<sup>78</sup>

Number of Prescriptions per Child per Year	3.9
Number of Different Drugs Prescribed	1,300
Percentage of Drugs without Safety or Efficacy Data in Children (in Health Canada approved Product Monograph)	75%

## USE OF NEWLY APPROVED DRUGS AMONG CHILDREN AND ADULTS IN 2000\*

Drug	Drug Use Per 1000 Children	Drug Use Per 1000 Adults
Celecoxib	27	210
Citralopam	59	93
Rofecoxib	17	207
Bupropion	85	162
Montelukast sodium	49	45
Formoterol fumerate	4	19
Levofloxacin	1	10
Tazarotene	6	10
Zarfirlukast	2	14

<sup>\*</sup> Of these drugs, Montelukast sodium and Formoterol fumerate are the only drugs for which there is safety and efficacy data in children as indicated on the Product Monograph

Reference: Prescription Drug Use by One Million Canadian Children, Paediatrics and Child Health, April 2003 Volume 8 Supplement A

The pharmaceutical industry may require incentives (such as an additional six months of data protection) to adequately label drugs with proper child dosage parameters. These incentives could be established through amendments to the existing Canadian food and drug and patent protection regulations. It is recommended that this change occur as soon as possible.

## C. ADVERSE DRUG REACTIONS AND TRIGGER POINTS

Adverse drug reactions (ADR) occur everyday in schools, paediatric hospitals, and at home. The Canadian Association of Paediatric Health Centres (CAPHC) has long been a leader in developing tools and advocating public policy changes designed to enhance patient safety for children and youth. A primary focus of this organization has been the creation of trigger points for adverse events. The Health Products and Food Branch of Health Canada has evaluated these trigger points and their correlation with adverse drug reactions in children's hospitals.

A study conducted by the Health Products and Food Branch of Health Canada looked at the feasibility of active surveillance for identification of life threatening ADRs in children. This study helped to establish the baseline for determining meaningful policies and practices for ADR among children and youth. Health Canada has fulfilled its role of evaluation and ensuring the efficacy of the trigger system. In an effort to improve child and youth safety, and as recommended by the Canadian Child & Youth Health Coalition and the Canadian Association of Paediatric Health Centres, all paediatric hospitals should implement the trigger system for adverse reactions such that adverse events may be avoided or minimized in the future.

## D. CREATING NATIONAL STANDARDS TO REDUCE MEDICAL ERROR

In health care, the use of automatic product identification – through easy to technologies such a bar coding or Radio Frequency Identification Product (RFIP) tags - can reduce medication errors by matching product data to patient data, with consent. The Canadian public has a heightened awareness of adverse medical events and counterfeit health care products. Automatic mechanisms are required so the health care system can ensure the authenticity of pharmaceutical, biotechnology and medical device products, and effectively and quickly recall and withdraw medical products where required. Automation also reduces the risk of inadvertent human error, thus increasing patient safety. Solutions for electronic standards which could be adopted by the federal, provincial and territorial governments to create a synergistic program linking the entire health care system are being created by organizations such as GS1 Canada. 79 These national standards supported by the Canadian Association of Paediatric Health Centres are required, quite simply, because they will save children's lives.80

Thus, national standards for medication tracking in Canadian paediatric health care institutions should be created to avoid these ADR's from occurring.

#### E. WALK AROUND ROUNDS

Health care institutions need to create a culture of patient safety by consciously promoting and implementing senior management walkaround rounds. This activity not only makes senior management more accessible to patients, staff, and families, but it allows them to see, first-hand, what hospital patients are



experiencing. Walk-around rounds should be mandated at all the paediatric hospitals and are strongly recommended for all paediatric health institutions in Canada.

## 5. DATA COLLECTION, SURVEILLANCE, AND INFORMATION DISSEMINATION

The Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) includes the collection, analysis, and reporting on cases of injury and poisoning, with the goal of reducing the prevalence of injuries to children and youth in Canada. Research is done by collecting data from the Emergency Rooms of ten paediatric and four general hospitals in Canada. While this is a very good surveillance initiative, it needs broader reach to meet the needs of Canadian children and youth. In particular, CHIRPP surveillance needs to address its current geographic gaps in rural and northern areas of Canada. Children aged 0 - 14 accounted for 13.6% of all agricultural injury fatalities experienced in Canada and 12.6% of the identified hospitalized cases.81 It is recommended that the Public Health Agency of Canada specifically target resources to increase surveillance activities on rural child and youth safety, including farm injuries, and to increase surveillance activities on northern child and youth safety.

CHIRPP is a good tool for determining what today's needs are – and what is "really happening" to children. However, it needs to be supplemented with the National Ambulatory Care Data, and other data sets, which provides population-based data with a broader picture of what is happening across the country. CHIRPP can tell us where problems are located within the health system and how to characterize them but integration

with other databases is needed to determine the extent of the problems, and whether they are being treated effectively.

There needs to be a far greater focus in Canada on effective surveillance for injury patterns in children and youth. While a number of organizations are involved in paediatric surveillance including the Canadian Paediatric Surveillance Program, there is not nearly enough done in either the field of unintentional or intentional injuries. Increased surveillance is critical because it can assess interventions to prevent the repeated occurrence of these problems. It also helps the development of best practice solutions and health policies. This is especially important in areas where medical conditions can, for a large part, be prevented altogether. The knowledge transfer that this data and research will illicit is critical to continue to reduce the number of Canadian children and youth who are visiting hospital emergency rooms with preventable injuries.

It is recommended that CHIRPP expand its surveillance to include additional community hospitals: two in suburban Canada and two in rural areas including one in Northern Canada. This will make its data more representative of Canadian children and their needs.

These initiatives would allow CHIRPP to collect meaningful data that can be provided to the broader stakeholder community. The communication of key research findings for injuries will strengthen pan-Canadian collaboration and significantly augment the current knowledge transfer.

# 6. COLLABORATION AMONG KEY STAKEHOLDERS - INFORMATION DISSEMINATION

The Canadian Injury Research Network (CIHRNet) is bringing multi-disciplinary injury researchers, programmers and policy makers together to focus on injuries to Canadians of all ages. While this is a positive step given the high concentration of injuries among children and youth, there should be a concentrated research focus targeted to young people. In addition, the research being conducted and collated by organizations needs to be made far more readily available in a more timely way. The federal government should take a leadership role and coordinate the dissemination of this data and key industry reports to ensure that it is brought to the attention of both the broader research community and to the general public.

## **BEST PRACTICE**

in Research Dissemination

The National Highway Traffic Safety Administration in the United States provides their research online for public downloading in a very timely manner. It can be viewed at www.nhtsa.dot.gov.

## 7. INCENTIVES AND SUPPORT FOR PARENTS

The use of protective equipment is critically important for a number of child and youth activities.

Far too often, children participate in sport or recreational activities without the proper protective equipment. Their parents may not be able to afford new, up-to-date equipment, or they may not know the standards the equipment needs to meet. One of the most important pieces of safety equipment to avoid significant permanent disability in many activities is an appropriate helmet. The use of helmets to prevent brain and spinal cord injuries in activities such as biking, skiing and skateboarding is critical, although it is recognized that some families in low socioeconomic situations might find it challenging to pay for the appropriate equipment.

In order to incent parents to purchase appropriate helmets for their children and teenagers it is recommended that the Government of Canada extend the Children's Fitness Tax Credit to include the purchase of protective helmets for physical activities. This would help parents ensure that their children are protected while participating in sports and recreational activities. It is also recommended that federal, provincial and territorial governments work to assist organizations such as the ThinkFirst Foundation of Canada with their "Givea-Kid-a-Helmet" program, to ensure that economic status is no barrier to brain and spinal cord safety.82



#### CONCLUSION

While there are many facets involved in the development of a National Injury Prevention Strategy, its complexity should not in any way hinder its creation. There is an urgent need for a strategic approach to paediatric injury prevention in Canada. Each part of the solution will bring us a step closer to significantly reducing preventable injuries and deaths of Canadian children and youth. By doing so, we free up scarce health resources to treat more children and keep more kids alive.

## II. CHILDREN, YOUTH, AND THE ENVIRONMENT

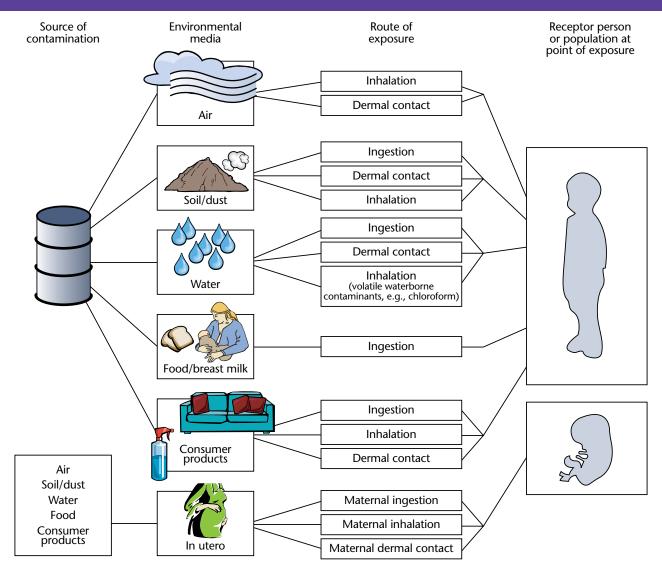
"As a new parent, I am concerned about our environment and how that will effect my children as they grow up."

Organizations such as the Canadian Partnership for Children's Health and the Environment<sup>83</sup> have put together excellent materials to help educate Canadian parents on environmental risk factors. Their resource guide, "Child Health and the Environment: A Primer", presents some interesting facts:<sup>84</sup>

- There are key physiological differences between adults and children that can make children more vulnerable to hazardous substances. For example,
  - A child's digestive system will often absorb foods and associated contaminants more efficiently than that of an adult; and,
  - In infancy, skin is more permeable than in later life, allowing the passage of many substances through the skin into the bloodstream.
- Kilogram for kilogram of body weight, a child will eat more food, drink more water, and breathe more air than an adult thus increasing their exposure to potential toxins; and,
- Children inhale air closer to the ground and floor compared to adults. Studies have shown that certain contaminants in air pollution (e.g., dense vapours) and dust particles settle in a vertical gradient, meaning that they are higher in concentration and therefore more available within a child's breathing zone.

As depicted in the next figure, exposure to environmental contaminants can occur through multiple pathways. This is an extremely important factor to keep top of mind when we are evaluating the environmental impact substances have on children. Often more than one pathway of exposure may be impacting the child.

## MAJOR PATHWAYS OF HUMAN EXPOSURE TO ENVIRONMENTAL CONTAMINANTS<sup>85</sup>



Source: Adapted from Health Canada, 1998.



In addition, new information continues to become available and the science in this area continues to evolve. As "Child Health and the Environment: A Primer" notes, "new information about children's environmental health surfaces on a daily basis."<sup>86</sup>

Both Health Canada and Environment Canada are responsible for the protection of health and the environment. There is no existing body that is currently responsible for children's environmental health and, as a result, activities are spread out across these and several other departments. The Government of Canada has undertaken a number of initiatives in this area, including a review of federal health protection legislation and an evaluation of the impact that chemicals might have on children's health. Further collaboration and coordination among government departments is required to address these environmental health challenges.

"I think that environmental contaminants are a huge issue and are made even worse by poor quality food and lack of physical activity. These are areas where the federal government could make a huge difference."

## WHAT CANADIANS SAID

During the consultation process, we heard very clearly that children react differently to their natural environment than do adults. Their physiology is different from that of adults and they are more susceptible to adverse health effects. However, little environmental testing occurs to determine possible health impacts specifically on children and youth populations.

Throughout the consultation process many issues related to children and the environment were raised. However, the three following issues came up most frequently – and most emphatically:

- The need for research and surveillance:
   A longitudinal cohort study on the environmental impacts on children and youth
- 2. Environmental Hazards: the need to protect children and youth
- 3. Encouraging a "Green" attitude among children and youth

#### **Environmental Health Indicators**

The first step towards establishing an environmental framework that protects children and youth is to establish meaningful indicators of disease that could be related to environmental health. What follows is an initial set of indicators to consider:

- Hospitalization of children and youth due to asthma or respiratory illness;
- Blood lead levels in children and youth;
- Percentage of children and youth exposed to second-hand smoke in Canadian homes;
- Percentage of Canadian children and youth with exposure to air pollution (both indoor and outdoor); and,
- Percentage of Canadian children and youth with access to safe drinking water.

In order to improve the environment to which Canadian children and youth are exposed, we must collect bio-monitoring data on indicators for substances that could impact meaningfully upon health outcomes. These indicators will allow Canada to begin to benchmark against the world's best, so that Canada can become the world's best.

## **CHALLENGES AND ISSUES**

Children are different. Their physiology and developing bodies are fundamentally different from adults, and their bodies react differently to the environment around them.

Children's distinctive development traits mean that they are often or frequently at greater risk to environmental hazards for a number of reasons:

- Children's growing and developing bodies, make them more sensitive to environmental contaminants;
- Children are physically smaller than adults, therefore smaller dosages can have a detrimental effect;
- Children's actions and inquisitiveness –
  especially among infants bring them into
  closer proximity to potentially toxic
  substances through crawling, placing
  things in their mouths and swallowing
  objects; and,
- Children breathe faster, and cycle air more frequently then adults.

## Consider the following:

 Minute doses of air pollution or environmental toxins may have a miniscule effect on the large body mass of an adult, but could have a substantive impact on the developing body of a child.  Proportionately a child's brain is larger and receives double the blood flow compared to an adult. This places their mental development at greater level of risk when exposed to a toxin.<sup>87</sup>

Therefore, substances that are not dangerous or hazardous to adults can be hazardous to children. However, we know far less then we should about the impact of these environmental factors on children and youth.

## ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

As noted, there is a significant lack of clinical research on the impact of the natural environment on child and youth health. Work to bring together researchers, NGOs, and industry to create national, standardized key indicators on children's health is required. This collaboration is recommended, and the federal government through Health Canada and the Public Health Agency can show leadership by leading the process.

## A. SAFE ENVIRONMENTS PROGRAMME

The Vulnerable Populations Office (formally the Office of Children's Environmental Health of Health Canada) carries out a range of activities to protect children and youth's health from hazards in the physical environment.

It is focused on achieving three outcomes:

- 1. Strengthening the knowledge base of researchers between the physical environment and the health of Canada's children and youth:
- 2. Managing children and youth environmental health risks; and,
- 3. Enhancing the capacity of Canada to take action to protect children and youth from environmental risks.



The physical environment – air, water, soil – all have a significant impact on the health of Canadian children and youth. Parents repeatedly told us through the consultation process that they are worried about the potential negative long-term effects the natural environment is having on their children.

Thus, it is recommended that the office of "Vulnerable Populations" be refocussed on the three issues raised by parents across the country. It must also be empowered to <u>take action</u> to protect children from environmental risks, not just state it desires this outcome.

## **NEW INITIATIVES**

Health Canada and the Public Health Agency of Canada have a key leadership role to play in addressing the three key environmental health issues that parents, experts and children raised during the consultation process. The work of the Vulnerable Populations Office and other departmental bodies are addressing some of the concerns but more action must be taken.

#### **ENVIRONMENTAL LEADERSHIP**

- Research and Surveillance: Longitudinal Cohort Study
- 2. Environmental Hazards
- 3. Encouraging a "Green" Attitude Among Children and Youth

## 1. RESEARCH AND SURVEILLANCE: LONGITUDINAL COHORT STUDY

There is no debate that it is critically important for the Government of Canada, as well as provincial and territorial governments, to be protecting the health of our children and youth from exposure to harmful substances, objects and environments. However, it is also clear that additional peer-reviewed research needs to be completed, or to be commenced, on the effects that chemicals such as lead and mercury have on the health and well-being of children and youth such that trends can be determined.

This research must be focused, and address two key concerns:

- 1. Identifying biological indicators of environmental substances that have or could have an impact on the health outcomes of children and youth; and,
- 2. Identifying potential hazardous materials that could impact upon the health of children and youth.

There is a need for new research in this area so that we can target specific substances, objects and environments. Then the task will become one of continued surveillance and monitoring of these environmental factors to determine their long-term impact.

Specifically, a longitudinal cohort study should be conducted which encompasses fetuses at pregnancy to children 8 years of age, following them for ten years and monitoring their health status and outcomes.

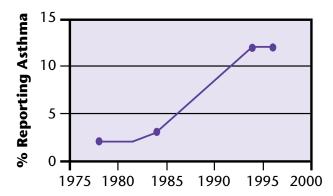
There are many environmental factors and chronic diseases that would be tracked by this longitudinal study and many Canadian experts and organizations that should be consulted in the design of the study. These include the Institute of Human Development, Child and Youth Research at CIHR, the network of allergy and immune disease experts (known as AllerGen), and numerous other nationally based centers which excel in this field.

The longitudinal study will not only provide invaluable data but also address the human resource gap in child and adolescent environmental health research. It will build capacity within the scientific community that focuses on children's environmental health issues, with researchers incented to perform work in this field.

The need for this study is enormous. Over the last number of years there has been an explosion of allergies. Asthma rates have skyrocketed and chronic disease rates have increased. Many factors contribute to this escalation in chronic disease among children. The environment is believed to be a substantive factor which, following further research, should lead to appropriate clinical and environmental changes that will positively impact the health of Canadian children and youth.

## REPORTED ASTHMA PREVALENCE, BIRTH TO 19 YEARS IN CANADA, 1978–199688

1984 survey included children 0–14 years only.
Percentages are weighted estimates.



Source: Health Canada, 1999.

# "Safety evaluations for chemicals, food-additives and pesticides must have sufficient developmental, toxicology data to protect children."

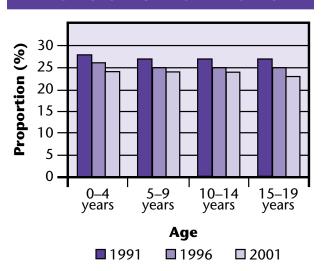
#### 2. ENVIRONMENTAL HAZARDS

The environment that a child is exposed to is multi-facetted. Air, water, soil, foods, and consumer products are all part of that environment and can impact on a child's health. Wherever a child lives, there are many environmental factors we cannot control. However, there are many things that parents, NGOs, and governments can do to meaningfully impact the environmental factors contributing to the health of Canadian children and youth.

Toxic substances on children's toys should be banned, and a proactive mechanism of evaluation coupled with real enforcement must be implemented. Currently, when a company or the government requests a recall of products, only a very low percentage of Canadians comply. We must do better. Hazardous products or toys must not just go to the attic or the garage so that a new generation in the future is exposed to them as well.



#### LEAD RISKS IN CANADIAN HOMES<sup>89</sup>



A large proportion (about 25 per cent) of children in Canada live in pre-1960 homes. This figure shows percentages according to data from the 1991, 1996 and 2001 national census. Paints manufactured before 1976 can contain dangerous levels of lead. Prior to 1960, lead levels in paint could be extremely high — in some cases as high as 50 per cent by weight. All old paint should be considered a lead hazard, during regular wear and tear (paint chips and any associated house dust) and especially during renovations (or when refinishing old furniture).

Source: Statistics Canada. Census of Population. 1991, 1996 and 2001.

In fact, there are a number of dangerous substances that still can be found in a child's immediate environment that could cause a lasting negative effect. For example, there are well-established human and animal data regarding the harmful effects exposures to lead have on pre-natal and child development. Lead poisoning is a chronic disorder, that may result in chronic irreversible effects including cognitive deficits and progressive renal disease. In a young child, the onset of clinical symptoms is usually abrupt with the appearance between one to five days of persistent and forceful

vomiting, attacks, seizures and alterations, and consciousness. They may have intractable seizures and coma. The long-term effects are devastating-cognitive deficits that are life-long.

It is therefore recommended that a number of steps be taken to better protect children and youth health from these substances including:

- The creation of a best practice labeling program for children's products.
   It would identify products that do not contain harmful chemicals and could be phased in over two years.
- 2. Since lead is found everywhere in the environment in trace amounts, and thus cannot be reduced to zero restrict the use of lead in children's toys in Canada to:
  - 90 mg/kg total lead in all toys intended for children under the age of 3;
  - 600 mg/kg total lead and 90 mg/kg migratable lead for all children's products; and,
  - Ensure that imported toys are rigorously tested to ensure they do not exceed these levels of lead.
- 3. Create a regulatory framework in which the evaluation of the health impact of exposure to chemical hazards such as mercury and lead are specifically reviewed in the context of children and youth, and not just as a subset of vulnerable populations.

A regulatory framework would assist in determining priority chemicals that should be evaluated and controlled. Once a hazardous material is uncovered during the evaluation process, **action** is required. The focus needs to be on action, so that children and youth are protected.

- 4. Strengthen the protection and monitoring of groundwater sources to reduce the potential exposure to chemical hazards such as mercury, lead, PCBs, dioxins, and polybromonated diphenyl ethers.
- 5. Modernize legislation to better protect children from health and safety hazards associated with consumer products by:
  - a. Modernizing the Hazardous
    Products Act to more effectively
    protect children and youth
    from health and safety hazards
    associated with consumer
    products. The federal government
    should have the legal power to
    respond quickly and appropriately
    to detected or identified risks;
  - b. Reforming and updating the Canadian Environmental Protection Act (CEPA) to control toxic substances in consumer products, through measures including improved labeling, product recall powers, and bans and substitutions; and,
  - c. As has been done successfully in California, implement an immediate ban on all non-essential uses of mercury in consumer products.

## 3. ENCOURAGING A "GREEN" ATTITUDE AMONG CHILDREN AND YOUTH

In addition to protecting children and adolescents from toxins and hazards around them, there is a need for Canadians to proactively embrace their role in protecting our natural environment.

Organizations such as Go For Green<sup>90</sup> are working in partnership with community organizations, Canadian corporations, and governments at all levels to support initiatives

to enhance personal and environmental health. Their excellent Walking Tour of Canada, allows students to track the number of kilometres they walk each day and visually see how far they have walked across Canada. This program not only promotes environmental health, it is also a great way to promote physical activity, and could be done in partnership with a private sector sponsor. Activities associated with the international Walk to School Month (October) where Canadian students are encouraged to walk to school to promote physical activity and less reliance on vehicular transportation should be encouraged. All Canadian schools should be encouraged to participate, even if only for the official International Walk to School Day each year.



#### CONCLUSION

Canadians' interest in the long-term health impacts of our natural environment continues to grow as they become more educated on potential environmental impacts. Children are more exposed to potential toxins – through toys, food, the natural environment – and are often not educated or informed as to what constitutes a possible hazard. Often, the environmental hazard is disguised or not clearly disclosed. There is a significant need for additional research in this area, so we can all make informed decisions based on scientific evidence on how to protect both ourselves and, more importantly, our children and youth.



#### SUMMARY OF RECOMMENDATIONS

## **Injury Prevention and Safety:**

- Health Canada and the Public Health Agency of Canada should work with provincial and territorial governments as well as health care experts, NGOs, and community organizations to develop and fund a 5-year national, evidence-based strategy for injury prevention in children and youth.
- In partnership with NGOs and community organizations, the federal, provincial and territorial governments should support the creation of safety villages in all major urban centres in Canada and pilot a "safety farm" in a rural centre.
- That Health Canada's Health Human Resource Strategies Division establish targeted education incentives to encourage additional clinical researchers to work in this area.
- That CIHR's Institute of Human Development, Child and Youth Research be encouraged to sponsor a knowledge translation research call for proposals in child and youth injury prevention within the next two years.
- Stronger regulations are required that enforce industry responsibility for the evaluation of children's toys and other products prior to entry to Canada, and prior to sale to Canadian parents and children. This could be aided by an evaluation of the product flow chain, identifying earlier, appropriate times to evaluate children's toys and other products before they enter the Canadian market.
- British Columbia, Newfoundland and Labrador and Ontario are to be commended as they have recently introduced life-saving booster seat legislation. All other provinces

- and territories are encouraged to implement similar legislation in the next 12 months, which would make booster seats mandatory for children aged 4-8 until they weigh 36-45 kg (80-100 lbs.) or until they are 132-145 cm (52-57 inches) in height.
- It is recommended that Health Canada work with the CSA to develop these helmet standards by December 2008 which will save childrens' lives.
- The Government of Canada should enact General Safety Requirement Legislation by December 2008 that includes due diligence standards and updated standards for product safety, specifically domestic and imported toys and products that are primarily designed for children and youth.
- An Advisory Group should be requested to review and provide recommendations on the safety and injury prevention issues noted in this Report within 12 months.
- National standards for medication tracking in Canadian paediatric health care institutions should be created.
- While CHIRPP is a very strong program, it needs a broader reach to meet the needs of Canadian children and youth, particularly in rural communities and the north. It is recommended that CHIRPP expand its surveillance to include additional community hospitals: two in suburban Canada and two in rural areas including one in Northern Canada.
- The Government of Canada should extend the Children's Fitness Tax Credit to include the purchase of protective helmets for activities for children and youth.

## **Children, Youth, and the Environment:**

- Additional peer-reviewed research needs to be completed, or to be commenced, on the effect chemicals, such as lead and mercury, have on the health and wellbeing of children and youth before trends can be determined. It should:
  - Identify biological indicators of environmental substances that have or could have an impact on health outcomes of children and youth; and,
  - Identify potential hazardous materials that could impact upon the health of children and youth.
- A longitudinal cohort study should be conducted which encompasses fetuses at pregnancy to children 8 years of age, following them for ten years and monitoring their health status and outcomes.
- Toxic substances on children's toys should be banned, and a proactive mechanism of evaluation coupled with real enforcement must be implemented.
- A best practice labeling program for children's products should be created.
   It would identify products that do not contain harmful chemicals (e.g. lead-free) and could be phased in over two years.
- The use of lead in children's toys in Canada should be restricted to:
  - 90 mg/kg total lead in all toys intended for children under the age of 3;
  - 600 mg/kg total lead and 90 mg/kg migratable lead for all children's products; and,
  - Ensure that imported toys are rigorously tested to ensure they do not exceed these levels of lead.

- Create a regulatory framework in which the evaluation of the health impact of exposure to chemical hazards such as mercury and lead is specifically looked at in the context of children and youth and not just as a subset of vulnerable populations.
- Strengthen the protection and monitoring of groundwater sources to reduce the potential exposure to chemical hazards such as mercury, lead, PCBs, dioxins, and polybromonated diphenyl ethers.
- Modernize legislation to better protect children from health and safety hazards associated with consumer products by:
  - Modernizing the Hazardous Products Act to more effectively protect children and youth from health and safety hazards associated with consumer products;
  - Reforming and updating the Canadian Environmental Protection Act (CEPA); and,
  - Implementing an immediate ban on all non-essential uses of mercury in consumer products.



# Obesity and Healthy Lifestyles

"Childhood obesity is now having a huge life expectancy impact, which was not foreseen ten years ago. Given the prevalence of childhood obesity, and given its contribution to many diseases, this is the first generation that may not live as long as their parents."



## "Broader issues that affect obesity for young people –

the built environment, our car-centred culture, daily exposure to fast food and junk food advertising - must be tackled in a co-ordinated way by all levels of government as well as NGOs.

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# Obesity and Healthy Lifestyles

The second main theme in this Report is obesity, and the need for Canadian children and youth to engage in healthy lifestyles *early on*, such that they become life-long habits.

## **Physical Activity, Nutrition**

To the readers of this Report, the statistics related to child and youth obesity that follow will come as no surprise. What is important for policymakers and people interested in addressing this challenge, is to stimulate more fresh thinking and set aggressive targets that lead to action.

## **Children and Youth with Disabilities**

This chapter also addresses health issues that are particular to children and youth with disabilities. In a country as respected and admired as Canada, let our approach to helping young people with disabilities serve as a model the world over.



## I. OBESITY

#### **BACKGROUND**

The statistics and reports related to obesity and lack of physical activity point to a very serious public health problem in our society. According to the World Health Organization, being overweight due to poor nutrition and lack of physical activity is one of the greatest health challenges and risk factors for chronic disease in the 21st century.91

Over the past decade, awareness of this global problem has grown. In fact, some have said that obesity is now such a serious public health concern that obesity is "the new tobacco".

The cause is simple: Canadians are eating too much food (including a heavy reliance on processed and 'fast' foods), and they aren't getting enough physical activity. Many factors are contributing to the obesity epidemic, and the solutions are complex. But, as noted by the Chronic Disease Prevention Alliance of Canada (CDPAC), it is about more than telling Canadians to eat right and exercise; there are significant other factors such as shifts in the traditional family to two working parents, and increased screen time.<sup>92</sup>

Today, 26% of Canadian youth aged 2 to 17 years are overweight and obese, and 55% of First Nations children on reserve and 41% of Aboriginal children living off reserve are either overweight or obese.<sup>93</sup> Canada ranks 19<sup>th</sup> among OECD countries with respect to the portion of its adolescent population that is obese or overweight (19.3%).

## CANADA'S OBESE YOUTH94

- In 2004, 26% of Canadian children and adolescents aged 2-17 were overweight or obese; 8% were obese
- For adolescents ages 12-17 the increase in the overweight/obesity rate more than doubled and the obesity rate tripled
- The overweight/obese rate for boys aged 12-17 in 2004 was 32.3%; the obesity rate was 11.1%
- The overweight/obese rate for girls aged 12-17 in 2004 was 25.8%; the obesity rate was 7.4%

There are significant economic impacts related to obesity. In 2000/01, obesity cost Canada's health system an estimated \$4.3 billion; \$1.6 billion in direct costs such as hospital care, drugs, and physician services and \$2.7 billion in indirect costs, such as lost earnings due to illnesses and premature deaths associated with obesity.<sup>95</sup>

"Children are spending too much time on television, computers, and computer games and do not know how to entertain themselves with activity."



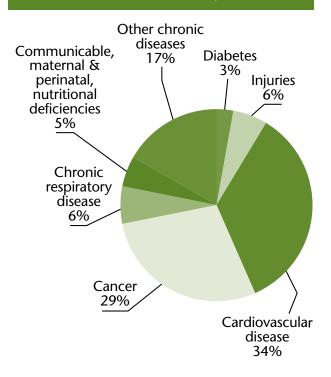


## YOUTH, OBESITY & LONGEVITY<sup>96</sup> (NEW ENGLAND JOURNAL OF MEDICINE)

- "If nothing changes for the better today's younger generations will live shorter lives than their parents"
- Over the next 40 years longevity may decrease by 3 to 5 years due to obesity
- Relative magnitude: cancer currently reduces longevity by 3.5 years

Source: Tjepkema M., Shields M. Measured Obesity: Overweight Canadian children and adolescents Nutrition: Findings from the Canadian Community Health Survey Issue No. 1 Statistics Canada July 2005

## PROJECTED DEATHS BY CAUSE,<sup>97</sup> ALL AGES – CANADA, 2005



Source: WHO. Preventing Chronic Disease: a vital investment. October 2005 Other reports present similarly alarming statistics. Ontario's former Chief Medical Officer of Health, Dr. Basrur commented in her 2004 Chief Medical Officer of Health's "Healthy Weights, Healthy Lives" report that"... between, 1981 and 1996, the number of obese children in Canada between the ages of seven and 13 tripled. This is contributing to a dramatic rise in illnesses such as type 2 diabetes, heart disease, stroke, hypertension and some cancers." 98

## WHAT CANADIANS SAID

"Children are spending too much time on television, computers, and computer games and do not know how to entertain themselves with activity."

Throughout the consultation process, obesity was consistently raised in every region of the country as a key concern of parents, children, and youth. Several specific issues were highlighted at the roundtable discussions:

- The need for children, youth and parents to be educated on the long-term risks of obesity
- The need for knowledge translation research in obesity
- The need for greater collaboration among all sectors of society to effect change in this field



## **Healthy Weight Indicators**

Our ability to address the challenge of childhood obesity will be dramatically increased through the establishment of standardized, pan-Canadian indicators. A number of organizations – including the Dieticians of Canada, Canadian Paediatric Society, the College of Family Physicians of Canada, and the Community Health Nurses Association of Canada, believe that the US CDC BMI-4-age charts should be used as the standard.

Thus, the indicators recommended, among others, to utilize for national comparable data collection are:

- Proportion of children (6-11 years) and adolescents (12-17 years) who are overweight and obese (based on measured BMI, abdominal girth or waist-to-hip ratios); and,
- US CDC BMI-4-age charts as a measurement tool.

The use of consistent growth measurement tools will allow for earlier and easier identification of childhood obesity and the short and long term health problems that can accompany it.

"Children are no longer given the opportunity to gain basic life skills such as how to be physically active or how to shop for healthy foods and prepare them. This has contributed to the obesity epidemic that reaches all children regardless of their demographics."

#### CHALLENGES AND ISSUES

Childhood obesity is an issue that does have long-term impacts on our population. Many life-long diseases are now beginning in childhood such as type 2 diabetes and high blood pressure. Obesity is now having a huge life expectancy impact, which was not foreseen ten years ago. Given the prevalence of childhood obesity, and given its contribution to many diseases, this is the first generation that may not live as long as their parents.

Obesity is a complex problem requiring a multi-faceted set of solutions. While many aspects of health care are a provincial and territorial responsibility, the federal government should facilitate and provide national leadership in coordinating the solution to this health challenge.

Complex problems often require multi-faceted solutions with many levels of government and sectors of society becoming engaged. In Canada, all sectors need to become more engaged than they currently are to combat obesity. We need to focus our efforts on making it easier for people, especially our children and youth, to make healthy food and physical activity choices.

## ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

The federal government can show leadership in a number of ways – all designed to help provide the solution for Canadian children and youth to live healthier lifestyles – through:

- 1. **National standards and goals:** a pan-Canadian healthy living strategy which focuses on making Canada a world leader when it comes to the health and fitness of our children and youth
- 2. Establishing a Centre of Excellence on Child and Youth Obesity:
  - Social marketing and public awareness campaigns which should be pursued aggressively to help young people to lead more active lifestyles. Canadian children and youth need to be educated to understand the importance of leading healthy lifestyles. They will then, in turn, educate their parents about just how important this is; and,
  - New innovations and translational research targeted at developing useful products and practices that children and youth can use.
- Providing incentives and supports to parents and volunteers to help children and youth
- 4. **Collaboration:** Supporting NGOs and private organizations. Health Canada and the Public Health Agency of Canada, can bring NGOs, the private sector and government agencies together to ensure the establishment and implementation of healthy food and activities targeted at children and youth are efficient and effective

There are two significant areas that need to be addressed if there is to be any progress in combatting obesity in our children and youth: physical activity and nutrition.

## I. PHYSICAL ACTIVITY

"As a Phys-Ed teacher in a high school, I see more and more the effects of poor fitness levels in the kids arriving from elementary school. Some kids cannot run for more than 20 seconds."

## **BACKGROUND**

It is estimated that physical inactivity costs the Canadian health care system at least \$2.1 billion annually in direct health care costs, with an estimated annual economic burden to Canadian taxpayers at \$5.3 billion.<sup>99</sup>

Children and youth who are regularly active in both organized and unorganized physical activities are at a lower risk of being overweight. Organizations such as PlayWorks in Ontario have estimated the costs to our social systems if children are unable to play and participate in physical activities. They discovered that there are huge financial implications for failing to make investments in these areas including lack of attention and disease development. <sup>100</sup> In addition, active children are less likely to commit crimes and they are more likely to stay in school and succeed later in life. This reduces long-term costs to Canada's social and health care support systems.



We need to add a fourth "R" to the traditional three "R's" taught in school – to focus on reading, writing, arithmetic, and *running*.

"Children should be provided with more physical activity in school and additional mandatory hours outside of school as part of graduating requirements."

### WHAT CANADIANS SAID

Throughout the consultation process, physical activity was consistently raised in every region of the country as a key concern of parents, children, and youth. Several specific issues were highlighted at the roundtable discussions:

- The impact of societal changes: dual working parents and the lack of affordable, after-school programming
- The need for tools for parents to help their kids
- The lack of access to facilities for recreational activities and sports

### **Physical Activity Indicators**

In order to reach national goals in weight reduction and increased physical activity – to have impact – action on this epidemic must be taken. Clear national indicators must be established to monitor progress in this area. Some indicators that could be followed are:

- Number of children and youth meeting the physical activity level stated in Canada's Physical Activity Guide for Children and Youth (60 – 90 min per day depending on age);
- Screen time per day;
- Family perceptions and roles regarding physical activity;
- Physical activity programming in school (amount per week);
- Training of school personnel to provide appropriate physical activity programs;
- Community facilities, outdoor spaces and programs; access and use;
- Sector investment in research, industry, foundations; and,
- Transforming after-school hours from screen time to active time.

Each of these indicators focuses on an area that impacts children's and youth's activity levels in a meaningful way. Data from these indicators, and others, could be used to focus policy and program development to combat this obesity epidemic.

Several reports that monitor children's activities already exist, which can be looked at to establish and set appropriate indicators.

There is no need to re-invent the wheel.

# ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

All of us – parents, paediatricians, health care providers, non-governmental organizations and governments – have a responsibility to encourage physical activity among children and youth. For the federal government, this means providing national leadership that focuses on prevention, and establishing healthy

living goals and standards for children and youth. It also means having standard, proven methodologies by which to track achievement against set physical activity goals.

### 1. NATIONAL STANDARDS AND GOALS: ESTABLISHING A PAN-CANADIAN HEALTHY LIVING STRATEGY

In 2003, federal, provincial and territorial (F/P/T) governments agreed to an Integrated Pan-Canadian Healthy Living Strategy, with the strategic goals of improving overall health outcomes and reducing health disparities. 101 This strategy contains specific healthy living targets for healthy eating, physical activity and healthy weights. It is recommended that F/P/T jurisdictions work to obtain a 20% increase in the proportion of Canadians who are physically active, eat healthily and are at healthy body weights. 102

Today, the rate of childhood obesity is 8%. In order to combat this high rate it is recommended that an additional target be created to specifically address goals for long-term child and youth nutrition, physical activity levels and healthy weights. It is recommended that Health Canada and the Public Health Agency of Canada, work with Canadian parents, NGOs, and the private sector to reduce the rate of childhood obesity from 8% to 5% by 2015, through an emphasis on a healthy eating and physical activity. While this objective may appear daunting, we must remember that by 2015 today's newborns will only be eight years old, and today's eight year-olds will be sixteen. There is no reason why these targets cannot be achieved.

In addition to setting national goals and setting indicators on healthy weights and activity levels, and in an effort to achieve them, the federal government could show international leadership by adopting a 'whole of government' approach to address this issue. All portfolios including agriculture, transportation and finance, among others, need to be encouraged to figure out how they can help create and sustain healthy environments. A 'whole of government' approach could accelerate the pace of real change. No new investment is required, just leadership and an open mind to a new way of doing business.

# **BEST PRACTICE**

**Report Card on Physical Activity** 

Active Healthy Kids Canada produces a yearly report card on the physical activity levels of Canada's children and vouth. It monitors indicators that involve assessment of physical activity levels, and the health and well-being issues associated with their physical activity levels. The report card looks at the role of societal influences that can facilitate or inhibit physical activity including family, school, community, government and others. In 2007, these indicators demonstrated that physical activity levels of children and youth are getting worse, while levels of support for physical activity in schools and progress on government strategies and investment are improving slightly.

# 2. CENTRE OF EXCELLENCE ON CHILD AND YOUTH OBESITY

For Canada to become a world leader when it comes to the health and wellness of children and youth, we need to establish excellence in translational evidence-based research – which in turn yields best practices, innovative products and services and top-notch programming.



The Public Health Agency of Canada's Centres of Excellence for Children's Well-Being focus on knowledge translation and research. This Report recommends re-allocating effort away from an area that may be of minimal value to the national interest – and to reallocate funding and effort to a Centre of Excellence focused on reducing childhood obesity – one of the top three concerns of Canadian parents.

Without requiring incremental resources, the Public Health Agency of Canada can consolidate and integrate a number of activities currently being undertaken to study obesity and incorporate these within the new Centre of Excellence on Child and Youth Obesity.

# KEY AREAS OF FOCUS FOR THE CENTRE OF EXCELLENCE ON OBESITY SHOULD INCLUDE:

- Setting national standards, indicators and goals
- 2. Knowledge translation research
- Collaboration and integration of governments, academics, NGOs, and private sector researchers
- New best practice initiative bringing <u>new</u> products, programs and services to market
- 5. The development of social marketing best practices targeted at determining messages that successfully impact the behaviours of children and youth
- 6. Information dissemination to help organizations offering programs to children and youth to be more effective

# i. National Standards, Indicators and Goals

Challenges with regards to data-collection, dissemination, research and surveillance are noted across the country. There is a need, in order to facilitate policy decisions by organizations, health care providers, and governments for more accurate and comparable data to be available. This data needs to be provided on both activity levels, as well as healthy foods accessibility. This data needs to be ethno-culturally and socioeconomically diverse, and include First Nations and Inuit populations.

Having data and disseminating it is only one step in the knowledge transmission chain. In addition to making comparable data available, a mechanism for knowledge exchange on the healthy weights for children and youth must be implemented.

### ii. Knowledge Translation Research

The Centre of Excellence on Obesity would be created from the existing Centres of Excellence for Children's Well-Being program. However, there will need to be additional collaboration with CIHR, NGOs, community organizations, and paediatric health research and care facilities.

Investment by the Government of Canada in an Obesity Centre of Excellence for children and youth, would accelerate the development of tools and platforms to facilitate research and knowledge translation, and more importantly, help organizations identify best practices for national implementation. There are a few 'best practice' programs that currently exist, including:

#### A. SHAPES

There is a clear need for research-based evaluation and surveillance of healthy weights for children and youth. A best practice example is the School Health Action, Planning and Evaluation System (SHAPES) that is currently being used in Ontario through the Ministry of Health Promotion. SHAPES, which is supported by organizations such as the Canadian Association for Health, Physical Education, Recreation and Dance, looks at physical activity and healthy eating in children and youth, and has the capacity to collect, analyse, interpret, and act on local data, which is essential to bridge research, policy and practice for population based prevention.

The SHAPES tool and system was developed by CIHR funded researchers at the University of Waterloo. The rapid expansion in demand for this tool demonstrates the need for ongoing investments in structural solutions that will be able to collect real world data to help assess the impact of our actions.

### **B. CANADIAN HEALTH MEASURES SURVEY**

The Canadian Health Measures Survey will provide excellent data for determining health outcomes of children and youth. More collaboration such as this should be supported, to ensure policy-makers' questions get answered with the collection of national data.

### iii. Collaboration

Collaboration opportunities exist in numerous areas that can have a substantive impact on the health of Canadian children and youth.

Many important networks, some with support from the federal government, have contributed to collaboration in untold ways. These networks include the Chronic Disease Prevention Alliance of Canada (CDPAC), the Canadian Obesity Network (CON), the Coalition for Active Living (CAL), and the *In Motion* group of communities, researchers, NGOs, and government. **Government investment in sustaining effective networks will go a long way to facilitate further collaboration.** Investments into these networks and their development should continue through a Centre of Excellence focused on obesity.

### **BEST PRACTICE:**

**In Motion** 

In Motion (<a href="http://www.in-motion.ca/">http://www.in-motion.ca/</a>) is a great example of how to seed and grow Centres of Excellence that build multisector partnerships. CIHR provided a large Community Alliance for Health Research grant to a group of researchers at the University of Saskatchewan. This \$1-million per year investment grew 10 fold over the last several years, developing into a program that is now being implemented in many cities across Canada. This project will help us to understand what works, for whom, and under what circumstances.

A Centre of Excellence on Obesity would be an ideal mechanism for the collection and dissemination of appropriate evidence based research and the evaluation of specific programs and best practices in this field. Canada needs to become the world leader in the battle against obesity. The sharing of knowledge is an excellent way to obtain that goal.



### iv. New Best Practice Initiatives

### A. NATIONAL AFTER-SCHOOL INITIATIVE

According to a recent joint United Way/ University of British Columbia report on middle childhood (children aged 6 – 12), 80% of mothers of school-aged children are participating in the work force. Over the last two decades this percentage has increased by 42%, with most of the increase occurring during the 1980s. The report also found that fundamental shifts in family composition, mobility and parental employment have led to decreases in family and community supports. These shifts have strong implications for the activity patterns of children and youth.

With 80% of parents working in our modern society, a 'witching hour' has been created between the time that many children and adolescents leave school and when their parents come home – roughly between 3 pm to 6 pm. This is a time slot during which children combine unhealthy foods with sedentary activities, such as watching television and playing computer games. It is also when some children get into trouble – either committing crimes, or using drugs and alcohol.

Parents are concerned about their children during this "after-school time". During the consultation process, parents repeatedly commented on the need for more after school programs. In addition, children and youth want things to do at this time. In fact, in a recent survey, 80% of kids wanted activities to do but did not have access to them or didn't know where to go for activities.

There is a tremendous opportunity for the federal government to show leadership, and encourage healthy activities during the after-school time period – especially among children and adolescents from lower- to middle-income families.

Research indicates that in the gap between official school hours and the hours that parents return from work, after-school programs can have a positive impact on the lives of young people.

# **BEST PRACTICE**

**Before- and After-School Programs** 

The Boys & Girls Clubs of Canada has entered into a partnership with Sears Canada, who provides grants to clubs across the country to enhance their after-school programs. "Excellence in Action: A Guide to Best Practices in After-School Programs" is a manual that provides program information and tips for professional program facilitators and is available to youth-serving organizations across Canada.

Many superb programs and services already exist. While the government has an important role to seek and share best practices, it does not need to get involved with program delivery. This Report recommends that the Government of Canada play a leadership role in after school initiatives by:

- Providing leadership and an action plan in this important area to alleviate parent worry and gets kids healthier;
- Promoting healthy, activity-oriented after-school activities by setting national targets for child and youth physical activity levels and healthy weights. This includes funding organizations that are providing excellent programs to support able-bodied and disabled children;

# **BEST PRACTICE**

for Accreditation

The HIGH FIVE program, run by Parks and Recreation Ontario (PRO), has developed quality assurance standards designed to support the safety, well-being and healthy development of children in all recreation and sport programs in Ontario. It provides tools, training and resources to parents, and physical activity instructors to ensure children are experiencing healthy development through quality involvement in sport and recreation activities. The program can be viewed at www.highfive.org.

- Establishing national standards in programming, designed to help Canadian children achieve the international benchmark in health and fitness;
- Helping in the promotion and marketing of quality after-school activities – both through third-party support and sharing best practices in social marketing.
   Promotional campaigns should be evaluated upon their completion to ensure they achieved their goals;
- Collecting data and evaluate best practices in after-school programming;
- Fostering collaboration among provincial Ministries of Health and Education, NGOs, and other organizations that provide after-school programming; and,
- Leveraging existing infrastructure: facilitating access to schools and community recreation facilities after school.

### B. INFRASTRUCTURE ACCESS INVOLVING THE COMMUNITY

A significant barrier to after-school physical activity is the lack of community venues available for use. While facilities do exist across Canada, there are often liability issues that do not allow them to be used as recreational facilities after school hours. 104 As suggested by the United Way Canada, the Coalition for Active Living and PlayWorks, it is recommended that reciprocal joint-use agreements be developed that cover the joint-use of schools and municipal facilities so that schools can use municipal facilities, and sport and recreation departments can use school facilities after school hours.

In addition, there needs to be an increase in infrastructure available for children and youth to engage in physical activity. Communities, provinces, territories, and the federal government should all participate in creating and supporting more playgrounds and recreational facilities through the creation of specific infrastructure funds.

### C. "WALK ACROSS CANADA" CHALLENGE

Kids want to have mechanisms by which they can track their success, either against their own pre-set goals or against each other. In this online challenge, children "compete" with kids from across Canada in a controlled environment to see who could walk further within 60 days. In this competition, children are encouraged to walk or run for '60 minutes every day for 60 days'. Children and their parents would record how far they ran or walked each day as part of the challenge, putting their results into a Health Canada sponsored web site. Every child that completes the challenge would receive an email from the Minister of Health officially recognizing their achievement. This web site would provide the opportunity for other social marketing messages and promotions,



and provide positive reinforcement for the physical activity.

# v. Social Marketing and Public Awareness

There are some outstanding social marketing campaigns that have already been created by NGOs and their media partners to educate parents and children on obesity. For example, the Boys and Girls Clubs of Canada, in conjunction with Corus Entertainment created a joint public service announcement called "Get Your Rear in Gear". This advertisement is targeted directly at children and youth and features a popular YTV character that encourages children and youth to get active by joining a Boys and Girls Club in their community, where they can participate in a variety of fun, healthy activities. 105 lt is a great example of how governments do not need to create social marketing programs themselves, but through leadership, can help NGOs collaborate with industry to take the work they are already doing and help them to distribute it to broader, national audiences.

Health Canada and the Public Health Agency of Canada have an opportunity to further increase public awareness through these existing programs.

### vi. Information Dissemination

While there are some excellent products that have been developed to educate children and youth and encourage them to lead healthy, active lifestyles, all too often they are not widely disseminated to their target audiences.

# A. PHYSICAL ACTIVITY GUIDE FOR CHILDREN AND YOUTH

The Government of Canada's Physical Activity Guide for Children and Youth is an excellent resource guide for teachers, parents and children, and provides valuable information in a variety of formats. However, few parents know these materials are available for their use. 106 Similar to Canada's Food Guide, this document needs to become a "Fridge Favourite" for parents and children. Social marketing and public awareness of this document is recommended, and should emulate that of Canada's Food Guides.

# KEY RECOMMENDATIONS OF CANADA'S PHYSICAL ACTIVITY GUIDES FOR CHILDREN AND FOR YOUTH:107

Increase the time currently spent on physical activity by 30 minutes per day, and progress over approximately 5 months to + 90 minutes per day.

Physical activity can be accumulated throughout the day in periods of at least 5–10 minutes.

The 90 minute increase in physical activity should include 60 minutes of moderate activity (e.g., brisk walking, skating, bicycle riding) and 30 minutes of vigorous activity (e.g., running, basketball, soccer).

Participate in different types of physical activities — endurance, flexibility, and strength — to achieve the best health results.

Reduce non-active time spent watching television and videos, playing computer games, and surfing the Internet. Start with 30 minutes per day less of such activities and progress over the course of approximately 5 months to 90 minutes less per day.

# 3. PROVIDING INCENTIVES AND SUPPORTS TO PARENTS AND VOLUNTEERS TO HELP CHILDREN AND YOUTH

The increase in 'screen-time' among children and youth is contributing to the overweight/ obesity epidemic. Screen-time is defined as the time being spent watching television, playing video-games and using the computer; in essence, time not being physically active. We need to get kids off of the sofa and into the swimming pool. Initiatives, such as "TV Turn Off Week," and summer camps with no TV access are encouraging kids (and the rest of their families) to give up television, computers, and video games and instead, play and participate in physical activities.

The federal government has a role to play in providing incentives to parents. It has shown leadership in this area through the Children's Fitness Tax Credit. Parents stated during the consultation process that they desired more tools like this to help them help their children.

### 1. CHILDREN'S FITNESS TAX CREDIT

The Government of Canada took a ground-breaking step in 2007 by implementing its Children's Fitness Tax Credit. This tax credit allows a non-refundable tax credit on eligible amounts of up to \$500 paid by parents to register a child in an eligible program of physical activity. The success of this initiative demonstrates that such fiscal tools encourage parents to help their children get physically active. Over the next two years, the Children's Fitness Tax Credit should be evaluated for its effectiveness in improving the activity levels of Canadian children and youth, as was recommended by the Expert Panel on the Children's Fitness Tax Credit. The success of the program of physically active.

#### 2. CHILDREN'S COACHING TAX CREDIT

It is recommended that a non-refundable tax credit for participation of Canadians in certified coaching programs be introduced. This initiative will build the capacity to help kids to participate in sports. Coaches are an important part of child and youth activities. They motivate, educate, and inspire kids to achieve new goals. A Children's Coaching Tax Credit will encourage more Canadians to gain the important skills of coaching so that more qualified volunteers are available to motivate our children and youth. This incentive should be limited to programs provided to children under 16 years of age, and to programs that meet the eligibility of the Children's Fitness Tax Credit.

### 4. COLLABORATION: SUPPORTING NGOS AND PRIVATE ORGANIZATIONS

"When the Bough Breaks" was a CIHR funded study at McMaster University that demonstrated the link between economic well-being and children's physical activity. "When the Bough Breaks" followed single mothers, and looked at a number of social factors to determine their correlation with health and well-being. Among other conclusions, it concluded that:

- The use of social assistance decreased with the use of child care and recreation services (15% of people exited social assistance within a year); and,
- The use of recreation services paid for itself through reduced costs of probation, child psychiatry, child psychology and social work services accessed.<sup>112</sup>

This study clearly demonstrates that recreation is a key part of helping families, and in particular child health.



A 2001 study showed that 279,750 adolescents in Canada were excluded from playing sports because they couldn't afford to participate. With the statistics stating that obesity levels have tripled in the last 10 years, and more than 20% of Canadian children and youth overweight or obese, excluding more than a quarter of a million adolescents from being able to fully participate in activity should be avoided.

Numerous organizations including KidSport™, The Canadian Tire's Jump Start Foundation and the Community Foundations of Canada are focusing their charitable time and efforts on helping children participate in sport and recreational activities. Working together in communities has provided excellent opportunities for many children to get active.

KidSport<sup>™</sup>, Jump Start<sup>™</sup> and many other programs provide promising opportunities but do not have the necessary resources or expertise to learn from their successes and challenges, and to sustain and improve their programs in the future.

Health Canada can play a leadership role in facilitating collaboration and networking among these excellent NGOs and private organizations with linkages to CIHR researchers and other Government of Canada experts. These collaborations will result in stronger policy and programming for kids – ones that we **know** will have impact on improving their health outcomes.

### **CONCLUSION**

The Pan-Canadian Healthy Living Strategy is a good framework with which to begin to improve overall health outcomes and reduce health disparities. However, healthy living behaviours need to become ingrained behaviour as early as possible. It is only

through continual education and aggressively ensuring opportunities for all children and youth to participate in regular physical activities that our kids will adopt active living behaviours for the rest of their lives.

# **BEST PRACTICE**

to Help Kids Participate in Physical Activity

KidSport™ is a national children's charitable program that helps disadvantaged kids overcome the barriers preventing or limiting their participation in organized sport. Its mandate is straightforward; combat rising user-fees, help provide access to the key growth development tools inherent in sport, empower community leaders and educators to provide a confidential process aimed to help kids participate in sport, and bring the fun back to sport. To date, the national KidSport™ program has helped over 50,000 kids.

The Governments of Canada, New Brunswick, Newfoundland and Labrador, and Ontario all support the Canadian Tire Foundation's Families Jump Start™ Program. This program is national in scope, and focuses on local programs to help kids in financial need participate in organized sports and recreation such as hockey, dance, soccer and swimming. For more information on these programs, please visit:

http://www.canadiantire.ca/jumpstart http://www.kidsport.ca The "Quality Physical Education Program" developed by CAHPERD is an excellent example of best practice type of programming needed to get kids active. Canadian children and youth need **quality** physical education not just more programs.<sup>113</sup>

### II. NUTRITION

"I think that nutrition needs to be addressed from day one. I see kids eating fatty foods constantly and portion sizes are out of control everywhere you go."

### **BACKGROUND**

The challenge around proper nutrition for Canadian children and youth is rooted in two polarities:

- Some of our children are eating too much; and,
- Some of our children are not eating enough.

With all of the conflicting information trying to grab the public's attention, parents no longer know what a good meal for their children is any more. They want to do what is right in terms of nutrition, but find advertising and labelling confusing and misleading.

# **BEST PRACTICE**

Tools to Help Parents Plan and Budget for Nutritious Meals for their Children

### Canada's Food Guide

Breakfast for Learning's nutrition program management resources help families manage their nutrition programs.<sup>114</sup>

Dietitians of Canada's **EATracker program** allows individuals to track their day's food and activity choices and compares them to the guidelines established by Health Canada.<sup>115</sup>

### **Nutrition Indicators**

To reach national goals in weight reduction and improved nutrition, action on establishing clear national indicators must be established to monitor progress in this area. Some indicators that could be followed are:

- Number of children and youth meeting the requirements of the Canada Food Guide per day
- · Access to fruits and vegetables
- Access to daily milk and dairy requirements

Numerous other indicators could be monitored to assess the nutritional status of Canadian children. As with physical activity, several reports focussed on child nutrition already exist, which can be looked at to establish and set appropriate indicators. There is no need to re-invent the wheel.



"I think the nutrition habits learned at an early age are critical in maintaining health both physical and mental for life."

### **CHALLENGES AND ISSUES**

One of the primary components of a healthy lifestyle is proper nutrition. It has become all too easy to rely on processed and fast foods, or skip meals entirely. This is happening even though the risks of poor nutrition are well documented. Poor nutrition has links to the rise in obesity, with lower life expectancies and all the attendant physical and emotional problems, including an increase in type 2 diabetes, heart disease, cancer, and depression.<sup>116</sup>

Twenty-five percent (25%) of children do not get breakfast in the morning and the statistics worsen as children get older. The McCreary Centre Society's Adolescent Health Survey found that 45% of 14 year old adolescents in British Columbia skip breakfast, rising to 57% as youth reach 17.<sup>117</sup> Canada needs to set some aggressive targets to improve child and youth nutrition patterns if we are going to move from youth to adulthood with healthy eating and physical activity behaviours.

# ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

Together with physical activity, healthy eating habits and healthy foods are the second key component of a healthy lifestyle. Health Canada and the Public Health Agency of Canada have an opportunity through the **Centre of Excellence on Child and Youth** 

**Obesity** to show leadership by fostering collaboration with industry and NGOs, encouraging best practices and investing in social marketing in this area. In addition, there are a number of actions that should be implemented in order to promote health eating habits among our children and youth.

### **NUTRITION INITIATIVES**

- 1. Innovation and Partnering with Industry
- 2. Portion Size
- 3. Nutrition Labelling and Nutrition Information Transparency
- 4. Social Marketing and Advertising
- 5. Best Practices to Promoting Healthy Eating in Schools
- 6. Food Scarcity

### 1. INNOVATION AND PARTNERING WITH INDUSTRY

Currently there is no mechanism to link corporate Canada, who want to improve nutrition outcomes, with NGOs who are looking for assistance to promote their programs.

It is recommended that an Industry/NGO Liaison Advisory Group be established within 6 months of this Report to encourage industry, NGOs and government collaboration. Among other tasks, this Group should act as a facilitator with the Centres of Excellence, to help private sector partners link with NGOs, Health Canada, and the Public Health Agency of Canada programs to promote healthy eating and activity.

These partnerships can have many benefits from driving innovation to creating synergies that result in greater program reach.

#### 2. PORTION SIZE

Ideas for innovations like the "100 calorie package" and portion-size plates (to help those of us who need to be more mindful of how much we eat) came from research about our eating behaviours. Investment in collaborative research through programs like the CIHR/NSERC Collaborative Health Research Projects bring health researchers together with engineers, computer scientists, and other natural scientists to foster innovation aimed at helping Canadians make healthier choices everyday.

A significant contribution to the obesity problem is over-eating – especially portion size. Healthy living targets should also apply to serving sizes of products. It is recommended that Health Canada work with industry to mandate smaller portion sizes of 'junk food' containers including pop cans, chocolate bar sizes, and chip bags over a two year implementation horizon.

## 3. NUTRITION LABELLING AND NUTRITION INFORMATION TRANSPARENCY

Labelling on food packaging continues to evolve in response to consumer demand for greater transparency and additional nutrition information. According to estimates, the mandatory labelling currently found on packaged foods will reduce nutrition-related disease by 4% and could generate economic benefits of 5 billion dollars over the next 20 years.<sup>118</sup>

In Canada, there are opportunities to change current labelling requirements so that packaging includes both information about the nutrient content of food products and clearer packaging icons to show extreme content (e.g. salt shaker, toothbrush for sweets).

The federal Standing Committee on Health's "Healthy Weights for Healthy Kids" report provided a number of recommendations with respect to food labelling which should be implemented, including mandatory food labelling on the front of food packages. In the absence of a Canada-wide system, food companies and health organizations have created their own individual labelling systems which are confusing for consumers. Consistency is needed and required. It is recommended that the labelling be visually clear, easily interpreted and be front-ofpackage. The revised labelling should commence with foods that are primarily for children. A phasing-in process of two years for industry to comply is recommended.

In addition, building on the recommendation of Ontario's former Chief Medical Officer of Health, it is recommended that large chain and fast food information should, in a way that is easily accessible to the public, disclose basic nutrition facts about the food they serve on both the food packaging and on the public display **board (e.g. a column of calories).** 119 A similar initiative was introduced in New York City in 2006 where they adopted regulations to force restaurant chains to post calorie content information on their menus and menu boards. It allows consumers to make sound nutritional choices and provides a means of curbing the growth in overweight and obesity, as well as the health problems associated with excess calorie consumption.

#### 4. SOCIAL MARKETING AND ADVERTISING

Our children and youth are bombarded, at a younger and younger age, with media messages about food choices. They are offered conflicting messages about what are healthy food choices and are attracted to flashy campaigns designed to make junk food 'fun'.



In the United Kingdom, restrictions have been put in place preventing television programs for young children aged four to nine from featuring advertisements for unhealthy food products. As of January 1, 2008, the same constraints will apply to programs for children up to the age of 15, as well as shows aimed at adults but commonly watched by children. Dedicated children's channels have been granted a graduated phase-in period to alter their advertising contracts, meaning they have until 2009 to fully implement the measures.

The European Union has proposed a ban on product placement in children's television programs. The proposal is awaiting ratification by the European Parliament and all member nations' governments.

In Canada, currently only the province of Quebec has restrictions on product advertising during children's shows.

Earlier this year, the Government of Canada joined with the Concerned Children's Advertisers, Food & Consumer Products of Canada and Advertising Standards Canada to address issues of childhood obesity. 120 Member companies have agreed to shift the emphasis of their children's advertising and marketing to healthy active living messages and/or foods and beverages that are consistent with healthy living. Facilitation of collaboration such as this should be emulated with other NGOs and industry.

"Ban advertising of 'sugary' and other unhealthy choices by everyone, or at least during children's television programming and other mediums directed at children."

### A. ADVERTISING TO CHILDREN

We all know that advertising influences child behaviour and attitudes. With respect to advertising to children, there are two things that need to change if we want Canadian children to, on their own, make healthy eating choices:

- There be an increase in the amount of healthy food advertising on children's programming; and,
- There be a ban on the advertising of junk food on children's programming targeted to children under 12.

Some progress has been made in these areas already. Concerned Children's Advertisers includes many of Canada's large food manufacturers and children's media programmers. <sup>121</sup> Campaigns such as 'Long Live Kids' is designed to, in a fun way, educate kids about healthy living and eating while they watch popular children's shows.

Concerned Children's Advertisers, recognize the need for research that focuses on health outcomes and not just brand recognition, to help them understand the true benefits of their work. Based on their current work, 97% of kids who are canvassed say they have seen the campaigns. However, these commercials need to be available during all children's programming. It is encouraged that organizations advertising to children work in partnership with advertising agencies and media outlets to provide additional support for these important public service announcements.

### 5. BEST PRACTICES TO PROMOTING HEALTHY EATING IN SCHOOLS

Research shows that undernourished children are typically fatigued and uninterested in their environment compared to their well nourished peers. Children who eat breakfast have

improved memory, problem-solving skills and creative abilities. Unfortunately, children are increasingly skipping meals, do not have access to healthy food choices or are not provided with enough time to eat their lunch.

There are a number of best practice programs related to school nutrition. In British Columbia, a joint program of the BC Dairy Foundation, the BC Government and the Knowledge Network provides an excellent school healthy eating assessment tool. It provides students with the knowledge, skills, and support they need to adopt healthy eating behaviours, meet their nutritional needs and perform better in school.<sup>122</sup>

Another outstanding best practice program is the BC School Fruit and Vegetable Snack program. Fruits and vegetables are provided by local producers, and students receive a fruit or vegetable snack twice a week, every other week. Students eat the snack during class time, not at recess or lunch as it is not meant to replace the foods students normally eat at school.

A similar program exists with the Dairy Farmers of Canada (Ontario) who work with elementary schools in Ontario to deliver an elementary school milk program.<sup>124</sup> This program makes fresh, cold milk available on a daily basis at school for lunch and provides curriculum materials to help teachers educate their students on the benefit of milk and milk products as part of a healthy diet.

Provincial and territorial governments should be encouraged to partner with their local Federations of Agriculture and Dairy Producers to create similar programs in their jurisdictions, with an initial focus on northern and remote communities.

It is further recommended that the Joint Consortium for School Health develop a working group with nutrition related NGOs and industry to facilitate the introduction of these, and other programs, into schools across Canada.

### 6. FOOD SCARCITY

While there is continual international attention paid to food shortages around the globe, it is surprising for Canadians to learn that there is an issue of food scarcity in some regions of Canada. While we are a nation that is a net agricultural exporter, there are geographical challenges ensuring that fresh produce is available, and affordable, in all areas of the country. Food scarcity is a particular concern in remote Northern communities, especially in First Nations and Inuit communities. Assurances should be made to ensure that these communities have access to a healthy, affordable food supply.

## **BEST PRACTICE**

to Help Food Scarcity

The Ontario Ministry of Health Promotion has piloted a northern fruit and vegetable program that provides approximately 12,000 children and youth in the Porcupine and Algoma health units with two to three servings of fruit and vegetables each week, as well as education on the benefits of fruit and vegetable consumption.



The challenges of food scarcity are substantive. Access to fresh fruits and vegetables, milk, and other regular supplies are things that many Canadians take for granted. Dealing with these necessities of life are not trivial tasks for Canadians living in remote Northern communities, especially in First Nations and Inuit communities in the Canadian Territories.

# **BEST PRACTICE**

to Educate about Food Scarcity

The Government of Nova Scotia has put together an outstanding discussion guide on this topic entitled, "Thought About Food", that provides methods by which this discussion can happen.

Thus, it is recommended that an evaluation be completed, with First Nations and Inuit organizations, on the methods to provide remote communities with access to nutritious foods at reasonable costs including Food Mail Program and the use of traditional foods. This recommendation is similar to that made in the "Healthy Weights for Healthy Kids" to the Government of Canada. However, in addition to this, it is recommended that this evaluation be further supported by a working group including people from First Nations and Inuit communities, and individuals living in remote communities of Northern Canada, to provide local and community based direction with regards to this challenging program.

### CONCLUSION

In conjunction with physical activity, proper nutrition is a necessity if our children and youth are to lead healthy lives. Parents are the primary influencer in terms of children's nutritional habits and it rests on all of us to find the time to ensure our children are provided with healthy, nutritious foods that have been properly prepared. We also need to continually educate our kids – from as early an age as possible – on the benefits of healthy food choices. This can not be accomplished without the support of food and beverage manufacturers, advertisers, government, educators and parents. We all must begin today to make this an ongoing priority, for the life-long health outcomes of our children and youth.

# III. CHILDREN AND YOUTH WITH DISABILITIES

### **BACKGROUND**

"A hand up, an open mind and a strong arm to hold on to" are key components to enabling people with disabilities. 125 Four percent, or over 140,000 Canadian children and youth have a physical or intellectual disability – 77% of these children have three or more disabilities.

**These statistics are significant,** and thus this Report identifies a number of areas in which the governments can – and should – work with NGOs, volunteers and parents to facilitate better health outcomes for children and youth with disabilities.

### WHAT CANADIANS SAID

It was immediately apparent through the national consultations that parents and caregivers are shouldering much of the work in both caring for and ensuring that children and youth with disabilities have access to health services.

Often these health needs are intensive and time-consuming. Services are not always easily accessible, forcing parents to drive long distances several times a week (or more) for years. We heard that there are not enough recreational facilities that are tailored to the unique needs of these children and youth with disabilities. We heard that there are waiting lists for services and unequal access to health care professionals who have specific training in working with children and youth. We heard that there is not enough priority being placed on providing children and youth with disabilities with the opportunity to lead normal lives.

### **Disability Indicators**

There are many indicators that can be utilized and evaluated as proxies for the health of children and youth with disabilities. The following are four recommendations of indicators which could be used as measures for health outcomes for children and youth with physical and mental disabilities:

- The number of programs accessible to disabled children and youth;
- The number of programs per year disabled children and youth access and participate in;
- The percentage of disabled children that are able to attend school; and,
- The time to access programs for families with disabled children and youth.

### **CHALLENGES AND ISSUES**

Children and youth with disabilities, and their families, face unique and great challenges. Throughout the consultation process many issues regarding children with disabilities were raised including their higher risks of injury, their challenges to participate in physical activities and the significant health risk inactivity is to them.

# TYPE OF DISABILITIES AMONG CHILDREN AGED 0 TO 14 YEARS WITH DISABILITIES, BY AGE GROUPS, CANADA, 2001<sup>126(1)</sup>

	Age groups					
Type of disability <sup>(2)</sup>	0 to 4 years		5 to 14 years		Total	
	Total number of children	Percentage of children	Total number of children	Percentage of children	Total number of children	Percentage of children
Hearing <sup>(3)</sup>	3,160 <sup>E</sup>	12.1	20,590	13.3	23,750	13.1
Seeing <sup>(3)</sup>	2,090 <sup>E</sup>	8.0	14,510	9.4	16,600	9.2
Speech <sup>(4)</sup>	•••		66,940	43.3	66,940	43.3
Mobility <sup>(4)</sup>	•••		21,150	13.7	21,150	13.7
Dexterity <sup>(4)</sup>	•••	•••	31,410	20.3	31,410	20.3
Delay <sup>(5)</sup>	17,820	68.0	•••		17,820	68.0
Developmental <sup>(4)</sup>	•••	•••	46,180	29.8	46,180	29.8
Learning <sup>(4)</sup>	•••		100,360	64.9	100,360	64.9
Psychological <sup>(4)</sup>	•••	•••	49,140	31.8	49,140	31.8
Chronic <sup>(3)</sup>	16,400	62.6	101,110	65.3	117,510	64.9
Unknown <sup>(3)</sup>	2,340 <sup>E</sup>	8.9	4,950	3.2	7,280	4.0

### ... Not applicable

- (1) The Canada total excludes the Yukon, Northwest Territories and Nunavut. The sum of the values for each category may differ from the total due to rounding.
- (2) The sum of the categories is greater than the population with disabilities because persons could report more than one type of disability.
- (3) Applies to all children under 15.
- (4) Applies to children aged 5 to 14.
- (5) Applies to children aged 0 to 4.
- "E" Use with caution

Source: Statistics Canada, Participation and Activity Limitation Survey, 2001.

# ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

The Government of Canada has an opportunity to take a leadership role in promoting best practices to help children and youth with disabilities. This involves working not only with these children, but also with their caregivers – often times their parents – to make sure they have the supports they need.

# THERE ARE <u>FIVE KEY AREAS</u> OF RECOMMENDATIONS THAT DESERVE FOCUS:

- Increasing opportunities for disabled children and youth to be active and physically fit
- 2. Helping parents by providing assistance for caregivers
- 3. Supporting health care professional, clinical and research resources
- 4. Enabling youth with disabilities to prepare for transition to adulthood including opportunities for work, leisure, independent living and full participation as citizens of the community
- 5. Helping to prevent disability through injury prevention

# 1. INCREASING OPPORTUNITIES FOR DISABLED CHILDREN AND YOUTH TO BE ACTIVE AND PHYSICALLY FIT

It has been repeatedly demonstrated that being physically active helps to decrease secondary medical conditions among children with disabilities. When these children have an opportunity to participate in physical activities, they are both physically and mentally more fit.<sup>127</sup> Physical activity for these children is truly therapeutic. It provides an opportunity for social interaction, perhaps an opportunity to walk for the first time, an opportunity to catch a ball for the first time or play a sport that is easy for others.

There are <u>four areas</u> in which the federal government should show leadership to improve the healthy lifestyles of these children:

- a. The development of a Physical Activity Guide for Children with Disabilities:
- Fostering collaboration and providing incentives to NGOs to provide programs that are accessible to children with disabilities, and integrated with able-bodied children;
- Infrastructure support to develop facilities that allow children with disabilities to fully experience recreation and sport activities; and,
- Maintenance of the Children's Fitness Tax Credit (\$1,000 for Children with Disabilities).

# A. DEVELOPING A PHYSICAL ACTIVITY GUIDE FOR CHILDREN AND YOUTH WITH DISABILITIES

The Physical Activity Guide has been an important tool for teachers, parents and children to utilize for improving their health. It sets the minimum standards for encouraging children and youth of all ages to get up and get active.

A similar tool is needed for children with disabilities - even more so than with able-bodied children. Caregivers, parents, and program directors require direction and instruction on how to get physically and mentally disabled children and youth up and active at an early age.



Thus, it is recommended that a Physical Activity Guide for Children and Youth with Disabilities with recommendations of specific activity programs for these children be created by the Public Health Agency of Canada. This Physical Activity Guide for Children and Youth with Disabilities should be developed in conjunction with organizations such as Special Olympics Canada, as well as the established children's rehabilitation facilities across the country (e.g. Bloorview Kids Rehab). These non-governmental and community organizations have an expertise in working with children with physical and intellectual disabilities. Their expertise should be sought in an effort to develop this important guide.

YMCA	http://www.ymca.ca		
Special Olympics	http://www.specialolympics.ca		
United Way	http://www.unitedway.ca		
Bloorview Rehab	http://www.bloorview.ca		

### B. PROVIDING INCENTIVES FOR NGOS AND COMMUNITY ORGANIZATIONS

There are a number of organizations including Special Olympics Canada, various parks and recreation groups, and children's rehabilitation centers, among many others, which do an outstanding job of providing services and activities for children and youth with physical and intellectual disabilities. However, they need help to expand the reach and the breadth of their physical activity programs. Support is needed to increase both the program capacity, and train more qualified people to provide these programs. **Thus, it is recommended that the federal government:** 

 Provide an incentive fund for community groups, NGOs, and children's rehabilitation centers such as Special Olympics Canada, Bloorview Kids Rehab and the YMCA to create and operate physical activity programs targeting disabled children and youth. These programs should meet the minimum standards of the Children's Fitness Tax Credit guidelines for eligibility.

- Provide and facilitate a collaborative environment among NGOs and communities to work with Special Olympics Canada, and other community based programs for children and youth with disabilities to deliver best practice programs for these children; and,
- Establish a coaching tax credit, to support coaching and training of key personnel who coach children and youth with disabilities.

### C. BUILDING INFRASTRUCTURE

Children with physical and mental disabilities have special needs which have to be met in order for them to participate in a physical activity as much as they possibly can. They often need individual support, special additional equipment, or infrastructure to participate meaningfully in sports and other physical activities. A child that uses a wheelchair cannot enjoy playing wheelchair basketball if they can't access the building, nor if the sidelines of the gymnasium are so narrow that they are unable to exit the floor. A child that is blind cannot enjoy participating in an indoor soccer game if the area of play is so loud that the bells and directional signalling are obscured by significant sound.

There are several large recreational facilities that have been modified to accommodate these children. However, there is a need for the infrastructure to be expanded to allow opportunity for the over 140,000 children with disabilities to participate in sport and recreational activities.

It is recommended that there be an expansion of Fitness and Life Skills Centres – and support for renovating existing facilities and infrastructure – such that they are present in every region of the country. Integrated models of sports, recreation, and life skills programs, combined with applied research and learning programs could be available to children and youth across Canada through these facilities. In addition, these Centres offer an opportunity for able-bodied children and youth to be integrated with disabled kids – a mutually beneficial learning experience.

#### D. CHILDREN'S FITNESS TAX CREDIT

The Government of Canada has already demonstrated its support for physical activity among children and youth through the implementation of the Children's Fitness Tax Credit in 2007.

The Children's Fitness Tax Credit is an excellent example of providing an incentive to parents to encourage their children to become more physically active.

The Expert Panel for the Children's Fitness Tax Credit recommended the expansion of the definition of eligibility for children and youth with physical disabilities to include transportation fees, equipment and provider care. In addition, the panel recommended explicitly, a doubling of the Children's Fitness Tax Credit to \$1,000 for all children with disabilities.<sup>128</sup>

# 2. HELPING PARENTS: PROVIDING ASSISTANCE FOR CAREGIVERS

According to a study by the Canadian Association for Community Living, 80 to 90% of caregivers are family and/or friends who are not formally paid. Of children with

disabilities whose parents required help, nearly 26% of children had parents who received some help but needed more. In addition, 40% of parents receive no help at all but needed support. A total of 71% of families identified cost as the reason for unmet needs of their disabled child.<sup>129</sup>

On average, the family income of parents with children or youth with disabilities is two-thirds of the average Canadian family without a disabled child. The household income of a family decreases by one third once a child in the family becomes disabled. 130 These economic and social pressures have a profound impact on families, including job constraints for parents and increased family breakdown due to the stresses associated with these challenges. In Canada, over 140,000 families - parents, siblings, grandparents - must cope every day not only with the health care challenges, but also with the financial challenges of their disabled child, sibling or grandchild.

The federal government can play a meaningful role in helping these children and their families in the following ways:

### A. IMPLEMENT INCOME SPLITTING FOR PARENTS OF DISABLED CHILDREN AND YOUTH

It is recommended that income splitting be allowed for parents of children or youth under 18 years of age with physical or intellectual disabilities (as defined by the *Income Tax Act*). This initiative would significantly reduce the economic burden on families, allowing them to focus on the health of their disabled children and their families.



# B. PROVIDE A TAX INCENTIVE TO COMPANIES/INDUSTRY TO DESIGN AND PRODUCE "BETTER ACCESS TECHNOLOGIES"

In addition to parents being supported financially, creating increased opportunities for their children to participate in activities of daily living is extremely important. A primary component of children with disabilities being better able to participate in activities is to leverage new technologies that enhance the skills they have and increase their independence. Thus, it is recommended that an "innovation" tax incentive be created to encourage industry to innovate and develop technologies that improve the daily function of children with disabilities (e.g. more ergonomic wheelchairs to improve daily function).

# 3. SUPPORTING HEALTH CARE PROFESSIONAL, CLINICAL AND RESEARCH RESOURCES

While there are a number of governments and organizations providing services and activities for children and youth with disabilities, there is no central database of information for individuals with special needs, their parents, health care professionals and the public to access.

Canada needs an easier way for organizations and individuals to access programs within and across governments. Currently, the system is far too complicated, even when one only considers federal government programs. In order to simplify access to services, it is recommended that Health Canada and the Public Health Agency of Canada support the development of a 'disability hotline' and public website that would, with one number and a single web-link, help parents and children and youth connect with the activities and programs they need. This 'warm line' and web-link should be designed

in partnership with stakeholder organizations and include information for parents on available services.

By providing parents with easier access and directional help, waiting times for access to services will be decreased through the more efficient and effective utilization of services.

As in a number of other areas, all governments should develop incentives to encourage individuals to work with children and youth with disabilities. While it is a very rewarding field, it is also one that experiences high levels of burn-out. Efforts should be made to keep those individuals currently in the field practicing, while simultaneously attracting new human resources.

# 4. ENABLING YOUTH WITH DISABILITIES TO PREPARE FOR TRANSITION TO ADULTHOOD

Children and youth with physical and mental disabilities want to fully participate as citizens of the community. They want to be treated similarly to able-bodied children, and to participate in our society similar to able-bodied kids. Part of this possibility involves having a part time job and participating in other regular activities the same as other teenagers.

Developing these life skills is important for the mental health of these children. The more integrated children and youth with disabilities are into the routine activities of other children, the more likely they are to learn the life-long skills that allow them to be more independent.

This independence has significant ramifications on their health, and the health of their families. By being more independent, they allow their parents to have some reprieve. They also become more confident and able to take on additional tasks that may allow them to become more physically active and mentally fit.

Thus, it is recommended that summer scholarships be made available to small business owners and non-governmental organizations to encourage the employment of youth with physical and mental disabilities such that these children can participate in part-time and summer job opportunities.

### 5. HELPING TO PREVENT DISABILITY THROUGH INJURY PREVENTION

Many children are born with physical and mental disabilities. However, far too many children and youth acquire intellectual and physical disabilities that could have been prevented. These children may have been involved in motor vehicle accidents without wearing seat-belts or not sitting in an appropriate booster seat. They may have fallen into a swimming pool and nearly drowned. Or they may have been skiing without an appropriate protective helmet. The impact these preventable injuries have had on their lives and the lives of their parents is profound. These children and youth are left with permanent intellectual and physical disabilities that are devastating to everyone concerned.

There are many things that parents, NGOs, community groups, governments, paediatric clinical experts and researchers cannot control. We do, however, all have a responsibility and an ability to help reduce the number of preventable injuries causing permanent lifelong disabilities in children. The initiatives in which Health Canada and the Public Health Agency of Canada can take action to reduce these injuries have been previously outlined in this Report.

### CONCLUSION

There is currently a large gap in terms of services and programs available to children and youth with disabilities that would allow them to lead normal, active lives. While there are a number of good programs taking place in jurisdictions across Canada, there is a real need to consolidate and educate patients, caregivers, health care professionals, NGOs, and governments on these best practices so they are employed in more jurisdictions. As articulated, there is also a real need for education so that caregivers know what options are available to them.

One must take a holistic approach to program development for these children and youth, considering not only the health needs of the child, but also requirements of the caregiver(s) and the healthcare professionals providing the clinical services. It is through this team approach, ensuring that all partners have the tools they need for success, that outcomes can be improved.

# SUMMARY OF RECOMMENDATIONS

### **Obesity and Healthy Lifestyles**

- It is recommended that Health Canada and the Public Health Agency of Canada work with Canadian parents, NGOs and the private sector to reduce the rate of childhood obesity from 8% to 5% by 2015, through an emphasis on healthy eating and physical activity. Helping to implement the obesity strategy, a Centre of Excellence on Obesity should focus on:
  - Bringing new products, programs and services to market that are best practises; and,



- The development of social marketing best practices targeted at determining messages that successfully impact the behaviours of children and youth.
- It is recommended that F/P/T jurisdictions work to obtain a 20% increase in the proportion of Canadians who are physically active, eat healthily and are at healthy body weights.
- The federal government should play the following role in after school initiatives:
  - Provide leadership and an action plan in this important area to alleviate parent worry and gets kids healthier;
  - Show leadership in the promotion of healthy, activity-oriented after-school activities by setting national targets for child and youth physical activity levels and healthy weights;
  - Help in the promotion and marketing of quality after-school activities.
  - Establish national standards in programming designed to help Canadian children achieve the international benchmark in health and fitness;
  - Collect data and evaluate best practices in after-school programming;
  - Foster collaboration among provincial Ministries of Health and Education, NGOs, and other organizations that provide after-school programming; and,
  - Leverage existing infrastructure: facilitate access to schools and community recreation facilities after school.
- It is recommended that reciprocal joint-use agreements be developed that cover the joint use of schools and municipal facilities so that schools can use municipal facilities, and sport and recreation departments can use school facilities after school hours.

- Similar to Canada's Food Guide, the Physical Activity Guide for Children & Youth needs to become a <u>"Fridge Favourite"</u> for parents and children. Social marketing and public awareness of this document is recommended, and should emulate that of Canada's Food Guides.
- Over the next two years, the Children's Fitness Tax Credit should be evaluated for its effectiveness in improving the activity levels of Canadian children and youth, as recommended by the Expert Panel on the Children's Fitness Tax Credit.
- It is recommended that a non-refundable tax credit for participation of Canadians in certified coaching programs be introduced.
- It is recommended that an Industry/ NGO Liaison Advisory Group be established within 6 months of this Report to encourage industry, NGOs and government collaboration. Among other tasks, this Group should act as a facilitator with the Centres of Excellence, to help private sector partners link with NGOs, Health Canada, and the Public Health Agency of Canada programs to promote healthy eating and activity.
- It is recommended that food labels be visually clear, easily interpreted and be front-of-package. The revised labelling should commence with foods that are primarily for children. A phasing-in process of two years for industry to comply is recommended.
- It is recommended that large chain and fast food information should, in a way that is easily accessible to the public, disclose basic nutrition facts about the food they serve on both the food packaging and on the public display board.

- It is recommended that:
  - There be an increase in the amount of healthy food advertising on children's programming; and,
  - There be a ban on the advertising of junk food on children's programming targeted to children under 12.
- It is recommended that organizations advertising to children work in partnership with advertising agencies and media outlets to provide additional support for important child health public service announcements.
- It is recommended that the Joint Consortium for School Health develop a working group with nutrition related NGOs and industry to facilitate the introduction of their programs, into schools across Canada.
- It is recommended that an evaluation be completed, with First Nations and Inuit organizations, on the methods to provide remote communities with access to nutritious foods at reasonable costs including a Food Mail Program and the use of traditional foods. It is recommended that this evaluation be supported by a working group.

### **Children and Youth with Disabilities**

- A Physical Activity Guide for Children and Youth with Disabilities must be developed by the Public Health Agency of Canada in conjunction with organizations such as Special Olympics Canada, and established children's rehabilitation facilities across the country (e.g. Bloorview Kids Rehab).
- An incentive fund should be provided for community groups, NGOs and children's rehabilitation centers such as Special Olympics Canada, Bloorview Kids Rehab and the YMCA to create and operate physical activity programs targeting disabled children and youth.

- It is recommended that Finance Canada consider establishing a coaching tax credit to support coaching and training of key personnel who coach children and youth with disabilities.
- There should be an expansion of Fitness and Life Skills Centres – and support for renovating existing facilities and infrastructure – such that they are present in every region of the country.
- It is recommended that income splitting be allowed for parents of children or youth under 18 years of age with physical or intellectual disabilities (as defined by the *Income Tax Act*).
- It is recommended that an 'innovation' tax incentive be created to encourage industry to innovate and develop technologies that improve the daily function of children and youth with disabilities (e.g. more ergonomic wheelchairs to improve daily function).
- In order to simplify access to services, it is recommended that Health Canada and the Public Health Agency of Canada fund a 'disability hotline' and public website that would, with one number and a single web link, help parents and children connect with the activities and programs they need.
- All governments should develop incentives to encourage individuals to work with children and youth with disabilities.
   Summer scholarships should be made available to small business owners and non-governmental organizations to encourage the employment of youth with physical and mental disabilities such that these children can participate in part-time and summer job opportunities.



# Mental Health and Chronic Illness

"Parents are growing increasingly concerned about the growing incidence of chronic diseases that can have an impact on both their child's health and their socialization. While parents are thankful for the earlier diagnosis due to better screening tools and techniques, there are often challenges with trying to access the appropriate follow-up services."



# "Mental health is so often forgotten.

Everyone thinks of physical health but nobody remembers the importance mental health plays and its impact on our society.

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# Mental Health and Chronic Illness

### **Mental Health**

The third important theme that is addressed in this Report is mental health. This subject was raised frequently over the course of the consultation undertaken in the development of this Report, and it is an issue where stigma, poor screening techniques, and a lack of health human resources exacerbate problems for children and youth.

### **Chronic Illness**

No commentary regarding the health and wellness of children and youth would be complete without addressing chronic illness and disease. This chapter makes important recommendations to help manage chronic diseases in children and youth, such that they can live happier more productive lives, while simultaneously reducing the burden on our health care system.



### I. MENTAL HEALTH

The 2006 Report of the Standing Senate Committee on Social Affairs, Science and Technology entitled "Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada" (Kirby Report on Mental Health) was a landmark report on mental health and addictions in Canada. A primary recommendation of this standing committee report was the establishment of a mental health commission. In Canada's 2007 federal Budget, the Mental Health Commission of Canada was established and is chaired by the Honourable Michael **Kirby**. This commission has a ten-year mandate, and has been tasked with making recommendations on mental health issues to the Government of Canada.

Due to the substantive and comprehensive mandate of the Mental Health Commission of Canada, and the need for an integrated approach for child and youth mental health, the recommendations within this section will be provided as an official submission to the new Commission. These recommendations should provide useful context to the Commission, and should be considered in the context of the work they are doing or are going to complete, on child and youth mental health.

### WHAT CANADIANS SAID

The 2002 report entitled "A Report on Mental Illness in Canada" describes mental illnesses as being "...characterized by alterations in thinking, mood or behaviour (or some combination thereof) associated with significant distress and impaired functioning over an extended period of time. The symptoms of mental illness vary from mild to severe, depending on the type of mental illness, the individual, the family and the socio-economic environment." <sup>131</sup>

Canadian children and youth are greatly impacted by mental illness. During the consultation process, we heard that the mental health issues impacting them are substantive. These issues can range from the impact of bullying, mental stress over exams and getting into good schools, to psychiatric illnesses such as schizophrenia and bi-polar disorder requiring the intervention of health care services.

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"Children are being pressured more and more every day to be better, smarter, and

faster than their peers.



# "Children are being pressured more and more every day to be better, smarter and faster than their peers."

### Mental Health and Substance Abuse Indicators

In order to best assess the status of mental health and substance abuse among children and youth, appropriate indicators that are utilized across all governmental jurisdictions and NGOs must be determined and consistently measured among the providers. The child and youth mental health indicators listed below are a base from which to build:

- Prevalence of smoking among children and youth 12-18 years old;
- Proportion of children and youth 12-18 who consumed alcohol in the last 12 months;
- Prevalence of substance abuse among children and youth 12-18 years old;
- Suicide rate among children and youth, particularly among aboriginal Canadians;
- Indicators for children with developmental disabilities (e.g. autism and other pervasive developmental disorders); and,

- Percentage of young children:
  - Displaying behaviours associated with emotional problem-anxiety/ hyperactivity-inattention/physical aggression – conduct problems; and,
  - Displaying age appropriate personal-social behaviour.

The consistent evaluation and measurement of mental health and substance abuse indicators will be invaluable in helping to determine interventions that work.

### **CHALLENGES AND ISSUES**

### CHILDREN AND YOUTH MENTAL HEALTH ISSUES<sup>132</sup>

- Number of Canadian children and youth affected by mental illness at any given point in time: 15% or 1.2 million
- Percentage of adolescents (aged 15-24) who report a mental illness: 18%

### **Anxiety**

- Most common mental health problem among children and youth is anxiety: 6.5%
- Age with the highest rate of anxiety symptoms: 20-29 years of age

### **Depression**

- · Age of onset for depression: Adolescence
- · Age with highest rate of depression symptoms: under 20 years of age

#### **Schizophrenia**

- Schizophrenia age of onset 15 25 years of age affects: 1% of population
- Chance of developing schizophrenia if one sibling and one parent have schizophrenia 10-15%
- Chance of developing schizophrenia if both parents have it 50%
- Chance of developing schizophrenia if identical twin has it: 50%
- Percentage of schizophrenics that attempt suicide 40-60%
- Likelihood of death by suicide 15 20 times greater than general population
- Percentage who die by suicide: 10%

#### **Bi-polar Disorder**

- Age of onset: Adolescents: 1% of population
- Mortality rate, including suicide: 2 to 3 times higher than the general population

### Suicide

- Percentage of all deaths among Canadians aged 15 24 suicide: 24%
- Age with the highest rate of depression symptoms: under 20 years of age
- Age of onset of depression: Adolescence

### **Eating Disorders**

- Age where there is the highest rate of hospitalization: 15 19 years of age
- Percentage affected: 3% of females, 0.3% of males
- Disorder with the highest mortality rate of all mental illnesses 10 20% die from the effects.
- Rate of hospitalization since 1987 for Canadian girls under 15: 34%
- Rate of hospitalization since 1987 for women aged 15 24: 29%

#### **Substance Abuse**

- The least common problem: substance abuse 0.8%
- Percentage of young adults 15 -24 with a mental illness or substance abuse problem: 18%
- Percentage of youth prostitutes who do <u>not</u> use alcohol or drugs: 8%
- Percentage of youth prostitutes who become prostitutes to earn money for drugs: 44%

Eighty percent (80%) of all psychiatric disorders emerge in adolescence, and are the single most common illness that onset in the adolescent age group.<sup>133</sup> Research indicates that at any given time, approximately one in seven (15 percent) of Canadian children and youth under the age of 19 are likely to have a serious mental disorder that impacts their development and ability to participate in common adolescent activities.<sup>134</sup> Unfortunately, only one in five Canadian children who need mental health services currently receive them.<sup>135</sup>

### **Greater Pressures at a Younger Age**

Our children and youth are experiencing increasing levels of pressure and stress at a younger and younger age. A greater number of Canadian children and youth are exhibiting signs of mental distress as a result of anxiety, bullying in and out of school, low self-esteem and insecurity. They are distinct from children who have more serious mental health disorders. which could include, but are not limited to, attention deficit hyper-activity disorder, addiction, and autism. Children and youth with mental distress and mental disorders are often identified and referred into the system too late - their problems getting worse with time. Fortunately, with the appropriate investments and access to treatment, it is estimated that 70% of childhood cases of mental health problems can be solved through early diagnosis and interventions. Early interventions can help these children and youth to lead normal productive healthy lives and save the costs that would otherwise be incurred by providing them with social services throughout their adult lives.

### **Little Uniformity Across Canada**

There is little uniformity in Canada in the delivery of paediatric mental health programs and services. In fact, the majority of provinces and territories do not have child and youth mental health plans. 136 These service gaps are exacerbated by a shortage of child and youth mental health service providers. The result is situations where children and youth are not able to access the mental health services they desperately need. Untreated mental illnesses in children and youth eventually cost Canadians exponentially more in long-term health care and social service system costs than they would if early interventional services for screening and diagnosis were to be applied when problems are initially recognized.

According to the Canadian Institute for Heath Information, "Differences in the provincial and territorial rates of separation and lengths of stay hint at the systemic differences that exist for the provision of hospital mental health services from a pan-Canadian perspective. The regional level data for these same indices give an idea of the intra-jurisdictional variations that exist for hospital mental health services." <sup>137</sup>

This inter-jurisdictional variation exists not only at the hospital service level, but also at the community services level. This variability and lack of access substantially contributes to the complexity, and challenges of accessing the mental health system within Canada.

### **National Mental Health Strategy**

Monitoring the state of mental health and substance abuse among Canada's children and youth is exceptionally important. The mental and intellectual well being of our children is extremely important for the social foundation and economy of the country.



Canada is the only country among the G8 nations that has not formally adopted a national mental health strategy, although responsibility for developing such a strategy is part of the mandate of the Mental Health Commission of Canada. This National Mental Health Strategy must include a focus on child and youth mental health issues, as mental health problems among children and youth are predicted to increase by 50% by the year 2020.<sup>138</sup>

"A new, strong focus is required on child and youth mental health – an area long overlooked but very important."

# ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

There have been numerous panels and parliamentary committees on mental health issues that have discussed paediatric mental health services. The time has come to take action and implement best practice solutions across the country in a co-ordinated manner so that every Canadian child and adolescent has access to high quality, professional, mental health services.

As noted, the urgent first step is the need for the development of a National Mental Health strategy that includes a focus on child and youth mental health issues. The public consultations undertaken for this Report uncovered six core areas where immediate action is required to strengthen the approach currently taken to address the mental health issues of children and youth:

- 1. Creating a national focus on child and youth mental health issues
- 2. Ensuring appropriate access to care, at multiple levels
- 3. Building health human resources capacity in paediatric mental health
- 4. Creating a research focus on paediatric mental health
- 5. Public education to increase awareness and reduce stigma
- 6. The need to effectively intervene and reduce suicide rates among Canadian youth
- 1. CREATING A NATIONAL FOCUS ON CHILD AND YOUTH MENTAL HEALTH ISSUES

NATIONAL CENTRE OF EXCELLENCE
ON MENTAL HEALTH AND SUBSTANCE
ABUSE AMONG CHILDREN AND YOUTH

To address the mental health issues facing Canadian children and youth, it is recommended that the Public Health Agency of Canada's Centres of Excellence for Children's Wellbeing Program transition to include a National Centre of Excellence on Mental Health and Substance Abuse Among Children and Youth. The six core areas that were outlined above should be the primary responsibility of this Centre. It should focus on increasing knowledge translation, facilitating collaboration, developing an

advertising and communications program, and ensuring the implementation of specific initiatives that will substantially impact the mental health outcomes of Canadian children and youth. In light of the progress which has already been made in these areas at the Ontario Provincial Centre of Excellence in Child and Youth Mental Health, progress in this area would be achieved most quickly by making this Centre the National Centre of Excellence on Mental Health and Substance Abuse Among Children and Youth.

# 2. ENSURING APPROPRIATE ACCESS TO CARE

Accessing paediatric mental health services in Canada is complex, confusing and frustrating for parents and patients receiving the services, and for the health care professionals delivering the services. Parents do not know where to go to get help for their children and adolescents. It is not a linear process; anyone can refer a child to a variety of different mental health providers (e.g. psychiatrist, social worker, psychologist) who may, or may not, be the appropriate person to deliver that level of care. Children and youth can also be referred privately, to community-based entities, or to hospitals, and thus funding from different sources are used to pay for mental health services.

Even within governments, children and youth mental health services fall within the purview of different departments and ministries including health, community and social services, child and youth services and education, depending on the provinces or territory.

### A. EXPERT PANEL ON MENTAL HEALTH ACCESS

In order to immediately facilitate the creation of a National Paediatric Mental Health Access Strategy, it is recommended that the Child and Youth Advisory Committee

of the Mental Health Commission of Canada establish an Expert Panel to focus on mental health access for children and youth in the first six months of their mandate. The panel should include a maximum of five people, including at least one representative from an NGO. The panel would provide specific recommendations to Canada's Minister of Health, the Mental Health Commission of Canada, and provincial and territorial leaders on the best access strategy; what it should include, how it should be implemented and what systems should be evolved or created so that Canada is looked to as the benchmark best practice jurisdiction internationally in terms of access to children's mental health services.

### **B. WAIT TIME STRATEGY**

Wait time strategies have been successfully developed and implemented in many health fields. They have been a useful tool for driving change into the Canadian health care system.

The creation of a wait time strategy for paediatric mental health will create system synergy and transparency. It is recommended that similar to the Paediatric Surgery Wait Time Initiative, a National "Wait Time Strategy for Child and Youth Mental Health Services" be developed in the next twelve months. Best practices from other wait time strategies can be utilized when developing appropriate processes for program administration and data collection for this child and youth mental health wait time strategy. Developing this strategy should be the first task of the Expert Panel.

#### C. MENTAL HEALTH HUMAN RESOURCES

It has long been recognized that there are significant health human resource challenges in the mental health system, with particular gaps in remote and rural areas. The Kirby Report on Mental Health makes excellent



recommendations including ensuring the seamless transition from youth to adult mental health services, the increased use of tele-psychiatry services, and the use of standardized, evidence-based group therapies, where clinically appropriate, to reduce existing waiting lists for services.

With respect to improving the access to child and youth mental health services, tele-psychiatry and tele-social work service consultants from all the mental health disciplines could provide a mechanism to reach those individuals in remote and rural areas on a regular basis and in a meaningful way.

Because of the lack of specialists and other ancillary health care providers in the field of mental health in Northern remote areas, it is recommended that a 'fly-in' mental health human resources pool be created. Functioning as a dedicated locum program, it should include a roster of social workers, therapists, physicians, and psychiatrists who are specifically trained in child and youth mental health practices and who are willing to provide assessments and help train local practitioners in best practices. This service will particularly benefit the Northern Territories and remote aboriginal communities.

### D. MENTAL HEALTH IN THE COMMUNITY

The Kirby Report on Mental Health also correctly identified the need – at all levels – for departments and ministries of health, education, social services, and justice to work together to deliver integrated models of service delivery and access to mental health services.

A number of jurisdictions are working towards using an Integrated Service Delivery model for the delivery of youth mental health services. There is a need for a greater number of jurisdictions to integrate

service delivery. This takes advantage of schools as sites or hubs for programs and services, and uses the expertise of different sectors to deliver the services within the school. This will locate the services where children and youth are already spending their time, and use existing infrastructure during off-use hours.

In addition, appropriate community mental health resources must be in place for our children and vouth. The 2004 Canadian Mental Health Associations booklet, "Handle with Care: Strategies for Promoting the Mental Health of Young Children in Community-Based Child Care," created in conjunction with the Hincks-Dellcrest Centre and the Gail Appel Institute, recognized that Canadian children are placed in child-care settings at a younger age. They correctly identified such settings as good locations for best practice mental health promotion activities, given the large paediatric population enrolled. 140 The brochure presents a survey of best practices and recommends a national approach to ensure consistency of resource availability across Canada.

As mentioned previously, it is difficult for parents to access mental health research and best practices, and specifically, to know what mental health services are available for their children and youth. Mental Health Resource Lists map out the existing landscape of mental health research and services. But unfortunately, there is no consistent approach to these lists in Canada. A good start has been made by Dr. Michael Cheng (Children's Hospital of Eastern Ontario) and Ms. Amy Martin (Crossroads Children's Centre) through their e-mental health website www.ementalhealth.ca. It is recommended that this Canadian best practice be funded to expand this portal service across Canada.

Through better access to quality mental health information service and research information, patients and parents will be able to better identify which services they need. Clinicians including psychiatrists, social workers, psychologists and other health care providers will be able to better determine appropriate management and treatments as well.

### **E. REFUGEE CHILDREN**

The federal government has responsibility for the delivery of health care services for refugee children for 90 days to one year after their arrival in Canada. These children are often significantly traumatized. In addition to requiring basic necessities of housing, food and education, many will experience post-traumatic stress from leaving a war-torn country and/or destitute poverty. The mental health services provided to these children require a special level of attention and care.

Government departments including Health Canada, the Public Health Agency of Canada, and Citizenship and Immigration Canada need to work cooperatively to find creative solutions that will prevent these children from "falling through system cracks". It is recommended that each refugee child aged 16 and under receive a mental health assessment with their physical assessment upon entering Canada, so they can immediately access mental health services if required.

# 3. BUILDING HEALTH HUMAN RESOURCES CAPACITY IN PAEDIATRIC MENTAL HEALTH

Canada is experiencing a shortage of mental health specialists and health care providers that are trained to cover a wide variety of services. All governments in Canada need to immediately work with NGOs, academic, and health care institutions to increase the training capacity of the entire spectrum

of mental health professionals and ensure that this training includes specific clinical instruction on child and youth mental health issues. While building this additional capacity should begin as soon as possible, it is important to recognize that this is a long-term solution.

Additionally, consideration should be given to developing innovative training initiatives that can enhance the capacity of all providers (professionals and non-professionals) to deliver appropriate mental health services consistent with their role in the health care system. Such needs driven, competency based models have the potential to substantially improve the child and youth mental health service delivery capacity while simultaneously encouraging the delivery of mental health care within the health care system rather than through current vertical mental health system models.

This capacity needs to be augmented in primary care settings. Thus, it is recommended that the Royal College of Physicians and Surgeons, the College of Nurses, and the College of Family Physicians, among others, create specific educational sections addressing child and youth mental health. With the Health Policy Branch at Health Canada, they should be encouraged to develop and deliver innovative training programs using a needs driven, competencies based approach that could be made available to both formal and informal providers.

In addition to the need for more paediatric mental health providers, there are additional challenges when it comes to resource allocation. Many paediatric mental health experts are not able to meet their full potential, while others are far too qualified for the work that they are doing. This leads to inequities in resource management where patients have challenges accessing the appropriate level of health care professional. **We need to create** 



a system that effectively maximizes the contribution of all health care providers in this area.<sup>141</sup>

Canada is fortunate in that we have a wealth of individuals who are just outside the health care system but who interact with children daily. It is recommended that a national best practice program on identifying children in distress be developed to educate people who have regular contact with children. For example, an NGO-trainer, teacher or child care provider could be trained to identify children in distress and work in a collaborative way with traditional health care professionals such as a social worker or psychiatrist. The goal is to focus individuals at their level of expertise and scope of training in order to maximize access to all health care professionals.

# 4. CREATING A RESEARCH FOCUS ON PAEDIATRIC MENTAL HEALTH

Surveillance and research on Canadian paediatric mental health practices is lacking. Greater partnerships between governments, academic and research institutes, private foundations, community groups and the private sector need to be encouraged in order to support and build research capacity. The **Norlien Foundation** based in Calgary, Alberta provides a best practice example. It has been working with academic and government partners to identify start-up funding to support the creation of a Mental Health Research Chair program. Ideally, additional partnerships of this type will develop, thereby helping more children to get help.

### 5. PUBLIC EDUCATION TO INCREASE AWARENESS AND REDUCE STIGMA

In Canada, there continues to be a social stigma attached to mental illness, especially with and among children and youth. Unfortunately, we have all witnessed the inappropriate and mean comments from children on the playground commenting on an intellectually-challenged or mentally-ill classmate.

According to the Canadian Mental Health Association, "Because of this stigma, many people hesitate to get help for a mental health problem for fear of being looked down upon. It is unfortunate that this happens because effective treatment exists for many mental illnesses. Worse, the stigma experienced by children with a mental illness can be more destructive than the illness itself."142 For years, individuals experiencing mental distress and disorders were kept in the background of Canada's health care system and the public discourse. Recently, national attention through vehicles such as the Kirby Report on Mental Health and prominent Canadians' comments are helping to foster public dialogue. However, to a large degree mental illness continues to be an area where there is much misinformation and a societal unwillingness to have an open and honest discussion about what needs to be improved.

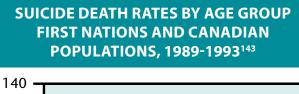
Thus, in an effort to inform parents and the public, as well as create behavioural change among Canadians towards children and youth with mental illnesses, it is recommended that creative communication plans be developed and implemented. Communication should specifically speak to the issue of stigma, and the need for societal tolerance for mental health disorders and the issues surrounding them. Similar to the multi-year tobacco strategy, best practice programs could be developed for educating people about:

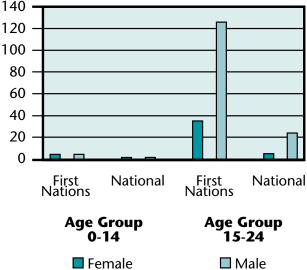
- Identifying children and youth with mental illnesses;
- The common denominators of coping; and,
- Methods of integrating them into their peer groups and education systems.

This communications program should be rigorously evaluated to assess the impact on modifying behaviours and improving the integration of these children into the education system. Since the Mental Health Commission intends to launch multi-year programs aimed at combatting stigma, consideration should be given to providing additional funding to the Commission to enable it to increase its focus on anti-stigma programs aimed at children and youth.

### 6. ADDRESSING YOUTH SUICIDE

Suicide in young people is a leading cause of death among Canadian adolescents and a public health concern. Suicide attempts outnumber completed suicide by a ratio of about 4:1.





Source: Canadian Institute of Child Health, 2000

Although a plethora of suicide prevention and "for profit" training programs are available, there is little substantive evidence on the effectiveness of most of these initiatives.

Given current evidence, early identification and effective treatment of young people with mental disorders is the most established approach to addressing youth suicide, but some other approaches such as gatekeeper training, restriction of access to lethal methods and training of primary health care providers in the detection and treatment of youth depression merit consideration. Unfortunately, many jurisdictions are currently applying unproven or ineffective youth suicide prevention initiatives while the wider provision of mental health care for youth with mental disorders is lacking. While some initiatives addressing research in this area have begun, much more is needed to inform the design, development, delivery and evaluation of the effectiveness of youth suicide prevention programs. It is recommended that the federal government provide specific research funds through the Institute of **Neuroscience, Mental Health and Addictions** (IMNHA) for immediate research to evaluate the effectiveness of existing youth suicide prevention programs.

### CONCLUSION

Canada urgently needs a National Mental Health Strategy that incorporates a framework for mental health services for children and vouth. We know that children who suffer from mental illness, and who remain untreated, are far more likely to be negatively impacted by health and social issues when they become adults. It is by openly talking about both the challenges and the solutions that we begin to break down the stigmas associated with mental illness in Canada. It is by all jurisdictions, stakeholders and health care practitioners planning and working together, towards a common goal, that our children and youth will be able to have timely access to the professional mental health services and programs they desperately need.



"Chronic childhood illness should be a top priority for receiving government support. These are health issues where we know the potential outcomes and can effect the long-term health of our children."

### II. CHRONIC ILLNESS AND DISEASE

In Canada, 1,300 children and youth develop cancer ever year<sup>144</sup>, 16% suffer from asthma, and a staggering 33% of Canadian children born today will develop diabetes. Overall in Canada, up to 20% of Canadian children and youth and their families are affected by chronic disease and illness they battle their entire lives. They need both the regular physical and emotional support of their parents or caregivers, and the support and care of the health care system.

Many Canadian children are affected by chronic diseases, which have a major impact on their health and development. Throughout the consultation process, many of these diseases and health issues were raised as being among the most substantive entities impacting on the health of Canadian children and youth. They included epidemics such as asthma, public health issues such as sexually transmitted infections, diseases for which there are no cures including diabetes and cancer, as well as those for which immunizations, pharmaceuticals and surgery can be effective for prevention and treatment.

### WHAT CANADIANS SAID

It was clear from the consultations in every jurisdiction that parents are growing increasingly concerned about the growing incidence of chronic diseases that can have an impact on both a child's health and their socialization. While parents are thankful for the earlier diagnosis of their child's health problem due to better screening tools and techniques, there are often challenges with trying to access the appropriate follow-up services.

### **Chronic Health Indicators**

In order to benchmark to the world's best, common indicators of chronic childhood and adolescent diseases should be monitored.

These indicators could include:

- Access to care/wait times for care;
- Children diagnosed with asthma (under 5 years, 5 – 18 years);
- Hospitalization due to asthma or respiratory illness (under 5 years, 5 – 18 years);
- Proportion of children vaccinated according to NACI guidelines;
- Incidence and prevalence of childhood cancers;
- Incidence and prevalence of type 1 and 2 diabetes in children;
- Rate of sexually transmitted infection and HIV diagnoses (12 – 18 years);
- Rate of teenage pregnancy (12 18 years);
- Prevalence of smoking among youth (12 – 18 years); and,
- Proportion of children tooth decay-free at ages 6 and 12 years.

Data on many of these, or similar indicators are already being collected. However, comparable indicators are required. The collection and dissemination of comparable data that is geographically equitable is extremely important for national program and policy development.

"Chronic diseases are a huge concern for all children and these stem from other issues such as obesity, tobacco and second hand smoke exposure as well as improper nutrition and poverty."

### **CHALLENGES AND ISSUES**

Methods of treatment and care for many childhood chronic diseases established. Canadian health care professionals are considered among the world's best especially in the treatment of asthma, type 1 and type 2 diabetes, and childhood cancers. However, these children and their families require more than medications and surgery to deal with their chronic diseases. They often are dependent on medical technologies and require emotional, physical and financial support. The statistics with respect to these children, similar to children with disabilities, show that family incomes average, one-third less than in a family of an equivalent size with healthy children.146

Many of these parents also carry the burden of possible long-term illness and possible death of their children at a young age. Health care professionals are often able, to the best of their ability, to speak to parents and family about the death of their child within a three to six-month timeframe. In order for these parents to spend time with their children in the last days of their lives, it is recommended that the compassionate care benefit currently provided for up to six weeks through HRSDC be increased to up to 12 weeks for the primary caregiver of chronically ill children and youth.

### ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

There are a number of disease categories where the federal government should proactively engage in consultation with P/T jurisdictions, and in the development of national standards and best practices. In some cases it involves encouraging the early adoption of new technologies, in others it is ensuring that children and youth are able to keep treatment close at hand. In all instances, Health Canada and the Public Health Agency of Canada need to work with P/T jurisdictions to ensure that children and youth who have chronic diseases have the health supports they need to lead as normal and healthy a life as possible.



The areas where Health Canada and the Public Health Agency of Canada are encouraged to play a role are:

### **CHRONIC ILLNESS INITIATIVES**

- 1. Asthma and Allergies
- 2. Diabetes
- 3. Immunizations
- 4. Pharmaceutical Research, Surveillance, and Labeling
- 5. Medical Screening
- 6. Transition of Care

#### 1. ASTHMA AND ALLERGIES

## "1 in 5 students have asthma and it is the leading cause of school absenteeism."

Asthma is a chronic inflammatory disease, in which children suffer from varying degrees of inflammation and muscle constriction of the lung airways. The result is shortness of breath and a feeling of suffocation. Children who can't breathe, can't play or enjoy many of the things most of us took for granted as kids.

Canada has one of the highest incidences of asthma in the world, and it is the number one reason for paediatric emergency room visits in Canada. It remains a major cause of hospitalization for children. Sixteen percent (16%) of Canadian children suffer from asthma, with the incidence of asthma in kids under 14 increasing 400% in the past 15 years. It increases youth with asthma visit an emergency room approximately four times a year. The cumulative cost of this to the health care system is one billion dollars annually.

Every year, asthma causes 20 fatalities in children. According to the Asthma Society of Canada, **many acute attacks in asthmatic children are preventable.** One Canadian household survey found that half of asthmatic school-aged children reported that household pets triggered or worsened their disease, yet 41% had a dog and 36% had a cat inside their home. Similarly, 54% of asthmatic children were exposed to second hand smoke, yet smoke was identified as worsening their asthma. Steps need to be taken to educate parents, children and youth on the issues that can prevent asthma and allergic reactions.

With approximately three children per classroom suffering from asthma, and with these numerous environmental factors impacting their ability to function, we must ensure that when our children and youth are in a school environment, they have all of the tools and assistance they need right at hand.

It is recommended that provincial and territorial governments be encouraged to legislate the right for children and youth to be allowed to use their puffers in the classroom. This simple change can directly save children's lives.

The same legislation should extend to Epi-pens for children with severe allergies. Children with severe allergies that could result in anaphylaxis are also at risk in school environments. Much work has been done in this area to protect our children and youth. Ontario leads the way with a best practice in 'Sabrina's Law';<sup>152</sup> it requires all school boards to develop policies to manage potentially life-threatening allergic reactions and to train staff to administer the life-saving Epi-pens. It is recommended that legislation similar to Sabrina's law be implemented across the country such that no child will ever die in a Canadian school due to an allergic reaction.

#### 2. DIABETES

#### A. INSULINUSE

There are two kinds of diabetes. In type 1 diabetes, the pancreas is unable to produce insulin. In type 2 diabetes, the pancreas does not produce enough insulin, or the body does not effectively use the insulin produced. As a result, glucose builds up in the bloodstream, potentially leading to serious health problems. There is a third type of diabetes – gestational diabetes – which is a temporary condition that sometimes occurs during pregnancy.

One in three Canadian children born today will develop diabetes, especially if they are members of high-risk populations. <sup>153</sup> While it is rare for children under five to develop diabetes, type 1 diabetes can occur in babies when they are only a few months old. Alarmingly, type 2 diabetes is now being found in children under five. <sup>154</sup>

#### **B. NATIONAL DIABETES STRATEGY**

Type 1 and type 2 diabetes are rapidly escalating among Canadian children and youth. The statistics are staggering:

- Approximately 176,500 Canadian under 20 years of age have diabetes;
- 1 in 400-600 Canadian children and adolescents have type 1 diabetes; and,
- In some aboriginal communities, 8-10% of children have type 2 diabetes<sup>155</sup>.

This serious disease has chronic and long-term health and economic impacts for Canada.

The control of a child's blood sugar is the best means to avoid future medical challenges such as kidney failure requiring renal dialysis, cataracts and retinopathy causing blindness, and neuropathy, which can lead to infections and limb amputations. It is recommended that a significant component of the National Diabetes Strategy focus on children and youth. By screening and identifying children early, as well as educating and training them to control their diabetes well, many of these substantive chronic medical problems can be decreased in adulthood.

As mentioned in the healthy lifestyle section of this Report, the correlation between type 2 diabetes and obesity is becoming well established. These statistics, and the rate at which the incidence of type 2 diabetes is growing, are staggering. The establishment of an adult disease such as type 2 diabetes in early childhood is alarming, and alerts us to the realization that we must deal with the prevention of adult disease during fetal development and childhood.

While many medications are used to manage diabetes, one of the most common ones is insulin injections used primarily for type 1 diabetics. In the same way that asthmatic children need continual access to their puffers, diabetic children need constant access to their treatments, often delivered through needles. It is recommended that provinces and territories be encouraged to pass legislation to allow diabetic children and youth to keep their insulin, and the delivery mechanism for their insulin and glucose monitoring devices in the classroom and available to them at all times.

### C. INSULIN PUMPS

While insulin pumps have been in existence for over 20 years, it is only in the last decade that they have become a more effective, mainstream way to help people with diabetes achieve better control of their blood glucose levels. Pumps help keep blood sugar levels



more constant with less fluctuation which is especially beneficial for people with type 1 diabetes. In fact, numerous longitudinal studies have shown that maintaining tighter control on blood sugar to normal levels leads to fewer long-term complications such as kidney disease, amputations and sight loss.

Currently, the *Income Tax* Act allows insulin pumps to be partially deducted as a medical device. It is recommended that Health Canada, through the National Diabetes Strategy, further support insulin pumps by:

- Educating children with diabetes about insulin pumps and other prevention and treatment methods that can improve their quality of life; and,
- Developing targeted education and communications to teach children about diabetes, especially type 2 diabetes.

### 3. IMMUNIZATIONS

### A. NATIONAL IMMUNIZATION STRATEGY

"We desperately need a consistent, national immunization strategy.
There are a number of possibly fatal, but highly preventable diseases which should not be neglected or given a low priority."

PUBLICLY-FUNDED IMMUNIZATION PROGRAMS <sup>156</sup>			
Province/Territory	2005 Status	2007 Status	Comments
British Columbia	Good	Good	Provides coverage for all five recommended vaccines but meningococcal vaccine is not given according to CPS and NACI recommendations.
Alberta	Excellent	Excellent	Provides coverage for all five recommended vaccines according to CPS and NACI recommendations.
Saskatchewan	Good	Good	Provides coverage for all five recommended vaccines, but meningococcal vaccine is not given according to CPS and NACI recommendations.
Manitoba	Good	Good	Provides coverage for all five recommended vaccines, but meningococcal and pneumococcal vaccines are not given according to CPS and NACI recommendations.
Ontario	Good	Good	Provides coverage for all five recommended vaccines, but meningococcal vaccine is not given according to CPS and NACI recommendations.
Quebec	Fair	Good	Provides coverage for all five recommended vaccines, but meningococcal and pneumococcal vaccines are not given according to CPS and NACI recommendations.
New Brunswick	Good	Good	Provides coverage for all five recommended vaccines, but meningococcal vaccine is not given according to CPS and NACI recommendations.
Nova Scotia	Good	Good	Provides coverage for all five recommended vaccines, but meningococcal vaccine is not given according to CPS and NACI recommendations.
Prince Edward Island	Good	Fair	Provides coverage for four of the five recommended vaccines. Meningococcal vaccine is not given according to CPS and NACI recommendations. A fee is applied for the administration of the influenza vaccine for infants aged 6-23 months.
Newfoundland and Labrador	Good	Good	Provides coverage for all five recommended vaccines, but meningococcal vaccine is not given according to CPS and NACI recommendations.
Yukon	Fair	Good	Provides coverage for all five recommended vaccines, but meningococcal and pneumococcal vaccines are not given according to CPS and NACI recommendations.
Northwest Territories	Fair	Good	Provides coverage for all five recommended vaccines, but meningococcal vaccine is not given according to CPS and NACI recommendations.
Nunavut	Fair	Good	Provides coverage for all five recommended vaccines, but meningococcal vaccine is not given according to CPS and NACI recommendations.



In recognition of the significant national public health benefits associated with immunizations – especially among child and youth populations – the F/P/T Advisory Committee on Population Health and Health Security (ACPHHS) developed a National Immunization Strategy (NIS) on behalf of the Canadian Deputy Ministers of Health.<sup>157</sup>

The NIS was seen as a means for F/P/T jurisdictions to work in partnership to improve the effectiveness and efficiency of immunization programs in Canada. In June 2003, the Conference of F/P/T Deputy Ministers of Health accepted the NIS's advice in moving forward on immunization issues in Canada. While there is a need for national collaboration in this area, provinces and territories continue to be responsible for planning, funding and delivering immunization programs to their respective populations, and to contribute to the shared activities that support a national immunization strategy. The federal government has demonstrated its commitment to this strategy, providing \$10 million in annual funding to enable strengthened collaboration with the provinces, territories and key stakeholders to improve the effectiveness and efficiency of immunization programs in Canada.

Even with the federal government investment, all Canadian children and youth do not receive equal access to vaccinations, leading to significant public health gaps. For example, only 76.8% of Canadian children have been immunized for DPT (a combination of 3 vaccines for diphtheria, pertussis, tetanus), placing Canada 26 out of 27 OECD nations.<sup>158</sup>

There is an important role for the federal government to play in helping to support new vaccines for children and youth. The National Immunization Strategy<sup>159</sup> helps facilitate a

pan-Canadian approach to immunization best practices. The National Advisory Committee on Immunization (NACI) makes recommendations regarding the use of human vaccines in Canada, including the identification of groups at risk for vaccine-preventable disease for whom vaccine programs should be targeted. All provincial and territorial governments fund, to varying levels, the administration of at least nine childhood vaccines (diphtheria, polio, tetanus, pertussis, Hib, measles, mumps, rubella, hepatitis B). It is recommended that the federal government continue to support the work of the National Advisory Council on Immunization (NACI) in getting valuable information to health care providers and parents. 160 In order to help facilitate this, it is recommended that updated versions of the Canadian Immunization Guide<sup>161</sup> be published every two years, instead of the current four year cycle. However, it is important to ensure that NACI is appropriately resourced to complete this task. NACI is a committee resourced by volunteers, and support for these individuals is required.

### **BEST PRACTICES**

in Immunization

Provincial and territorial jurisdictions are using innovative methods to encourage prevention through immunization. Best practices such as immunization drives (Saskatchewan) and door-to-door immunizations (Nunavut) ensure the maximum opportunity for coverage.

### B. LINKING THE NATIONAL CHILD BENEFIT TO IMMUNIZATION

In addition to making immunizations available, it is in the national interest to incent parents to have their children immunized. In an effort to motivate parents to protect their kids, it is recommended that the distribution of the National Child Benefit income supplement be linked to immunizations for children. Following in the footsteps of Australia, parents would not receive their national child benefit cheque unless they show proof of immunization or purposely declining immunization of their children. Immunizations save lives and are cost effective. We all have a responsibility to get every Canadian child immunized.

#### C. HPV

There are other vaccines that have recently been made available, that could have a direct impact on child and youth health. The federal government recently provided \$300 million to P/T jurisdictions to provide immunization for the Human Papillomavirus (HPV), the leading cause of cervical cancer.

With numerous new vaccines becoming available that have a substantive health impact on children and youth, public awareness, education and advertising is required to educate not only parents, but also children and youth of these potential benefits. It is recommended, that Health Canada, through the new Industry/ NGO Liaison Office work with the industry to develop the public awareness campaigns of these meaningful vaccinations.

### 4. PHARMACEUTICAL RESEARCH, SURVEILLANCE, AND LABELING

Currently, physicians are not willing to prescribe a number of innovative, new pharmaceutical products because there is often little clinical information available about their potential effect on children's physiology. In other cases, because there are no other options available, pharmaceutical products are being prescribed that have not been thoroughly researched for their potential impact on children and youth. While the challenges of conducting clinical trials on children are recognized, researchers, industry and clinicians need to identify ways of ensuring that products being approved for use in Canada have been appropriately evaluated for their impact on children and youth populations.

Many pharmaceutical products do not label their products with dosage guidelines for children and youth, creating situations where physicians prescribe the product to children and youth "off-label". This practice is dangerous, as there is no way to determine if there might be an adverse health reaction based on dosage. In Europe, the European Medicines Agency commissioned a paediatric expert group (PEG) to study off-label prescribing. The PEG reviews pharmaceutical formulation for children's use along with other indicators. In the United States, the Best Pharmaceuticals for Children's Act (1998) and the Paediatric Research Equity Act (2003) created legislative standards for children's use of drug products, including a restriction on children having off-label drugs.

It is recommended that Health Canada take the following action to better inform Canadians of the clinical effects of pharmaceutical products on children and youth:

 Establish a Canadian paediatric clinical pharmacological network;



- Commit to a dedicated research competition for drug research in children;
- Develop a Canadian national children's formulary as a web-based resource;
- Provide the pharmaceutical industry with an additional six months of patent protection for pharmaceutical products if pharmaceutical companies can demonstrate they are conducting product research that impact on children and youth; and,
- Take action to encourage pharmaceutical label changes for "on-label" child dosages. Clinical trial results should be reflected on product labels within six months of the trial completion.

This work should be conducted by the Office of Paediatric Initiatives (OPI) in the Health Products and Food Branch (HPFB) of Health Canada. The Paediatric Expert Advisory Committee on Health Products and Food (PEAC-HPF) will be able to provide excellent direction on these issues. The proposed research in this field should be considered and completed in conjunction with CIHR.

### 5. MEDICAL SCREENING

One of the most important things we can do to help improve child and youth health is to work together to ensure that our children get a healthy start to life, and that any potential health risks are identified and treated as early as possible. Part of this process is health surveillance which, where possible, should occur throughout childhood.

### **BEST PRACTICE**

"Health Fairs"

A best practice example recommended by the Child Public Health Agency (CPHA) is the "health fairs" concept. At the 'health fair', services are available as a one-stop health care offering for children and youth biannually. These health fairs are efficient and effective in screening and identifying childhood problems early – thus having a direct effect on health outcomes.

#### A. FIRST YEAR OF LIFE SCREENING

From birth on, there needs to be a concerted effort to ensure that children are appropriately screened and treated for conditions affecting single-entity organs with a specific focus on the eyes, ears and mouth. While there are many screening programs in place across the country, there is no single national best practice guideline that ensures the appropriate surveillance is occurring for all children. It is recommended that screening guidelines be created by the Public Health Agency of Canada for newborn and first year of life screening standards. This should be done in collaboration with provincial and territorial governments, as well as non-governmental organizations.

In association with national screening guidelines, a **National Child Screening Report Card** which clearly outlines to parents the key milestones their children should be achieving, and screening tests they should be receiving, is essential. It will allow parents to be empowered, and incented, to acquire the

key screening exams for their children. Health care professionals, NGOs, and governments have a key role to play in the development of this Report Card, and the implementation of these screening tools. It is recommended that a best practice National 'Five Senses' Child Screening Report Card be developed in collaboration with the provinces, territories and NGOs. This Report Card will provide parents with their child physical record of audiology, optometric, and dental screenings and treatments, as well as immunizations and developmental milestone exams.

There are a number of best practice programs and information packages that have already been created by P/T and other international jurisdictions. These should be reviewed by the Public Health Agency of Canada for their best practices.

Currently in Canada, two of the five components of the exam have programs and methods for implementation. The National Immunization Strategy is working to ensure all Canadian children are immunized while paediatrician and family doctors and nurses perform developmental assessments everyday. However, strategies for audiology, vision and dental care are not universally accessible, but are essential. NGOs, the private sector, professional organizations, governments, and patients need to work together to develop and implement this plan.

### **BEST PRACTICE**

**Screening Programs** 

- The Plunket program in New Zealand, runs stationary and mobile health clinics across the country where parents take their children at specific milestone stages in their development. The Plunket Nurse assesses the baby's growth and development, hearing, vision and wellness at each contact. Visits also include care and support for the whole family as they adjust to the needs of a new baby.
- The resource manual produced by the Institut National De Sante Publique du Québec (Government of Quebec) called "From Tiny Tot to Toddler: A Practical Guide to Baby Care," was created by health professionals and is a resource manual for new parents. It is divided into four sections: baby development, family harmony, breast-feeding and diet, and child's health (including disease prevention and first aid).
- The Rourke Baby Record is an example of a clinical guideline tool for child development that can be viewed as a best practice; however, it is too technical for use by parents but should be used uniformly by Canadian family practitioners and paediatricians. Parents could be provided with a shortened and adapted version of the record to specifically track, at a minimum, their child's growth, hearing, dental and vision development.



#### **B. AUDIOLOGY**

According to the Hearing Foundation of Canada 2,233 babies born in Canada have hearing loss - including some with profound deafness. 162 Early detection of hearing problems is critical to prevent any impact on a child's speech, language and social development. Unfortunately, Canada lags behind Europe and the United States where 86.5% of all newborns are now screened for hearing loss compared to just 41% in Canada. In spite of the fact that hearing loss is one of the most common birth defects, only Ontario, New Brunswick, PEI, the Yukon Territory and recently, British Columbia, have implemented universal programs for infant hearing screening and Alberta has enacted a pilot project in several communities. Newborn audiology screening is essential for children to have an excellent start in life. All provinces and territories are encouraged to implement this essential screening process.

### **BEST PRACTICE**

for Youth Audiology

The Hearing Foundation of Canada's Sound Sense Program is an education program that is delivered by teachers in a classroom setting to help pre-teens recognize the growing hazard of over-exposure to loud music which can lead to noise-induced hearing loss. An opportunity for further dissemination of this tool is through the network of the Joint Consortium for School Health. A mechanism for distribution of this 'awareness tool' may be facilitation through this collaboration that promotes school health promotion.

### C. DENTAL CARE

"As a paediatric dentist, I am continually amazed at the extensive decay that I see and treat on a daily basis in children under the age of 5 years.

Caries are a preventable disease, and yet we are spending millions on restoring teeth."

Dental caries (tooth decay) are the most common chronic disease among children. 163 Dental health has long been separate from primary health care services and is not included in most P/T health care coverage; it is largely left to private and corporate third party insurance plans. It therefore, comes as no surprise that dental disease is concentrated in disadvantaged groups who have no access to these third-party insurance policies.

Canada's treatment of oral health programs differs from several other international jurisdictions. Australia, New Zealand and the UK all have universal, national publicly-funded children's oral health programs. In Canada the level of provincial and territorial oral heath coverage for children and youth varies; some provinces provide no coverage at all.

The Governments of Saskatchewan, Ontario and Canada provide best practice examples in dental health. Saskatchewan has a province-wide program for dental care where, by the age of six, every child has had an oral exam, with their teeth capped or coated for future protection. Ontario offers coverage for a Far North Dental Program, which makes sure that any child in need of dental services can access

them. Health Canada has the Children's Oral Health Initiative (COHI) as a means to address the disparity between the oral health of First Nations and Inuit and that of the general Canadian population, which has been a very successful and effective program.

We all must work together to ensure that there are no economic barriers to Canadian children and youth accessing dental services. Dental services should be included as a necessary part of child screening programs and the recommended surveillance report card.

#### D. OPTOMETRIC CARE

About 80% of all babies are born far-sighted. Approximately 5% are born near-sighted, or unable to see objects at a distance clearly. Only 15 percent of babies are born with nothing wrong with the refractive parts of their eyes. Farsightedness usually decreases as a child ages, typically normalizing to a negligible value by the age of 7-8 years.<sup>164</sup>

Optometric eye tests are an important part of infant and child developmental screening programs. It is recommended that F/P/T governments ensure that they appropriately support optometric eye examinations for children and youth in their respective jurisdictions and include them as a necessary part of developmental surveillance such that there is no economic barrier to a child receiving a screening exam.

### E. SEXUALLY TRANSMITTED INFECTIONS (STI)

STIs have a life-long impact on infected children and youth. These kids may contract STIs due to risky behaviour, or simply through their infected parent. Parents, children and youth must be better educated in the risk behaviours, long-term impacts, and treatment options of these infections.

There needs to be stronger linkages between organizations and F/P/T government programs in this area in order to facilitate:

- Research in this area (e.g. McCreary report on BC street youth<sup>165</sup>);
- NGOs/educators delivering the preventative health programs (e.g. CANFAR); and,
- Voluntary and private sector organizations and foundations that could assist in supporting these programs.

Thus, it is recommended that governments partner with NGOs, community organizations and private sector companies to broadly spread the message about the risks and treatment options for STIs. These organizations know the issues well, and how best to communicate with those affected. Governments should "support them and get out of the way" of these organizations so more individuals can be reached.

As noted previously, the Government of Canada should be commended for its action to fund vaccinations which will help prevent infection for some types of Human Papillomavirus (HPV), offering protection against HPV types responsible for approximately 70% of cervical cancers. The goal now should be to educate young women on the opportunity to protect themselves. Collaboration with NGOs, community organizations, and industry will be key to making this happen.

### 6. TRANSITION OF CARE

There is a challenge ensuring appropriate care to adolescents, with what are considered to be 'childhood' diseases, when they become adults and no longer have access to paediatric specialists who have the expertise to treat their diseases. For example, neuroblastoma is a childhood cancer largely diagnosed and treated by paediatric physicians. Physicians who treat mainly adult patients have little



experience with this disease, and might not recognize symptoms when individuals present themselves for diagnosis.

Children with chronic diseases that live into adulthood have unique challenges. The transition to adulthood within the health care system, as well as accessing appropriate resources, can be frustrating. There needs to be a better process established for the transition of care from youth to adulthood, especially for individuals with specific 'paediatric diseases.'

The federal government can play a leadership role in this field. It is recommended that a Transition of Care Strategy and best practices be developed by the Health Human Resource Strategies Division of Health Canada in collaboration with the Royal College of Physicians and Surgeons, the College of Family Physicians and the College of Nurses. They should be encouraged to develop new fellowship and educational opportunities for undergraduate and postgraduate students in the field of transition of care for these adolescent patients.

### CONCLUSION

Every child and youth diagnosed with chronic disease and illness should have access to timely and professional health services, no matter where in Canada they live. This can be assisted by implementing screening tools that will catch disease as early as possible, and ensuring that immunization programs are universally available to help prevent common childhood diseases. Through the creation of uniform, measurable national standards for screening and the development of a "Five Senses' Child Screening Report Card, Canada will begin to take steps towards becoming a world leader in the identification and management of chronic disease and illness in children; however, there remains a long way to go.

### **SUMMARY OF RECOMMENDATIONS**

#### **Mental Health**

- A National Centre of Excellence on Mental Health and Substance Abuse among Children and Youth should be created to address the mental health issues facing Canadian children and youth.
- In order to immediately facilitate the creation of a National Paediatric Mental Health Access Strategy, it is recommended that the Child and Youth Advisory Committee of the Mental Health Commission of Canada establish an Expert Panel to focus on this issue in the first six months of their mandate.
- A National "Wait Time Strategy for Child and Youth Mental Health Services" should be developed in the next twelve months.
- Because of the lack of specialists and other ancillary health care providers in the field of mental health in Northern remote areas, it is recommended that a 'fly-in' mental health human resources pool be created.
- Each refugee child aged 16 and under should receive a mental health assessment upon entering Canada.
- It is recommended that the Royal College of Physicians and Surgeons, the College of Nurses, and the College of Family Physicians, among others, create specific educational sections addressing child and youth mental health. With the Health Policy Branch at Health Canada, they should be encouraged to develop and deliver innovative training programs using a needs driven, competencies based approach that could be made available to both formal and informal providers.

- It is recommended that a national best practice program on identifying children in distress be developed to educate people who have regular contact with children.
- The federal government should provide specific research funds through the Institute of Neuroscience, Mental Health and Addictions (IMNHA) for immediate research to evaluate the effectiveness of existing youth suicide prevention programs.

### **Chronic Illness**

- The compassionate care benefit currently provided for up to six weeks through HRSDC should be increased to up to 12 weeks for the primary caregiver of chronically ill children and youth, in order for these parents to spend time with their children in the last days of their lives.
- It is recommended that legislation similar
  to Sabrina's law be implemented across the
  country such that no child will ever die in a
  Canadian school due to an allergic reaction.
  It is also recommended that legislation
  be passed to allow diabetic children and
  youth to keep their insulin, the delivery
  mechanism for the insulin and glucose
  monitoring devices in the classroom.
- Currently, the Income Tax Act allows insulin pumps to be partially deducted as a medical device. It is recommended that Health Canada, through the National Diabetes Strategy, further support insulin pumps by:
  - Educating children with diabetes about insulin pumps and other prevention and treatment methods that can improve their quality of life; and,
  - Developing targeted education and communications to teach children about diabetes, especially type 2 diabetes.

- In an effort to motivate parents to protect their kids, the distribution of the National Child Benefit income supplement be linked to immunizations for children, similar to the approach being used in Australia today.
- It is recommended that the following action take place to better inform Canadians on the clinical effects of pharmaceutical products on children and youth:
  - Establish a Canadian paediatric clinical pharmacological network;
  - Commit to a dedicated research competition for drug research in children;
  - Develop a Canadian national children's formulary as a web-based resource; and,
  - Provide the pharmaceutical industry with an additional six months of patent protection for pharmaceutical products if pharmaceutical companies can demonstrate they are conducting product research that impacts on children and youth.
- Action should be taken to encourage pharmaceutical label changes for "on-label" child dosages. Clinical trial results should be reflected on product labels within six months of the trial completion.
- It is recommended that guidelines be created for newborn and first year of life screening standards.
- It is recommended that a best practice National 'Five Senses' Child Screening Report Card be developed in collaboration with the provinces, territories and NGOs. This Report Card will provide parents with their child physical record of audiology, optometric, and dental screenings and treatments, as well as immunizations and developmental milestone exams.



- It is recommended that we all ensure that there are no economic barriers to Canadian children and youth accessing dental services. Dental services should be included as a necessary part of child screening programs and the recommended National Child Screening Report Card.
- It is recommended that F/P/T governments ensure that they appropriately support optometric eye examinations for children and youth in their respective jurisdictions and include them as a necessary part of developmental surveillance such that there is no economic barrier to a child receiving a screening exam.
- It is recommended that a Transition of Care Strategy and best practices be developed by the Health Human Resource Strategies Division of Health Canada in collaboration with the Royal College of Physicians and Surgeons, the College of Family Physicians and the College of Nurses. They should be encouraged to develop new fellowship and educational opportunities for undergraduate and post-graduate students in the field of transition of care for these adolescent patients.



## Creating a National Office of Child and Youth Health

"Canadian parents, children and youth stated that they wanted an advocate and expert in child and youth health that would focus on their priorities of injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness."

## Creating a National Office of Child and Youth Health

The third and final request within the mandate of this Report was to advise the Minister of Health on whether a possible mechanism should be established to ensure the Minister of Health has independent and transparent advice on how to maintain and improve the health of children and youth.

WHAT CANADIANS SAID

Independent mechanisms that address child and youth issues have been established in a number of international jurisdictions (including Norway, Sweden, Australia, New Zealand, and England). A number of Canadian organizations including the Canadian Medical Association, the Canadian Paediatric Society, and the College of Family Physicians of Canada support the creation of an independent, national Child Commissioner or Office of Child Health which would protect and highlight health and human rights issues of all Canadian children. 166 The Canadian Senate Standing Committee on Human Rights also recently suggested the establishment of a Commissioner for Children and Youth at the federal level to monitor the protection of children's rights.<sup>167</sup>

Canadian parents, children and youth stated that they wanted an advocate and expert in child and youth health that would focus on their priorities of injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness.

### **CHALLENGES AND ISSUES**

Canada's children and youth do not enjoy the health that Canada is capable of providing. Comparative international statistics suggest marked room for improvement in child and youth health. The epidemic of childhood obesity, the existence of unmet mental health needs, the deplorable health status of Aboriginal children, and the need for aggressive injury prevention measures are all areas in which Canada can – and must – improve.

### ROLE OF THE FEDERAL GOVERNMENT: RECOMMENDED ACTION

While a number of different models were considered, it is strongly recommended that Health Canada and the Government of Canada create a new, National Office of

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### "Canadians were clear

that they support the Minister of
Health receiving independent
advice that is in the best health
interests of our children and youth."



<u>Child and Youth Health</u>. It would be housed at Health Canada, operate at a senior level and be lead by a distinguished Canadian brought in from outside of government who would report – via the Deputy Minister – to the Minister of Health. The Office should consist of 6 to 12 individuals and be provided with a clear mandate and budget.

What follows are detailed suggestions regarding ways in which this office and role can be most effective – working along side governments, and with strong linkages to professional healthcare associations, NGOs, and community organizations.

### **Mandate**

The mandate of this Office, led by a Senior Advisor on Healthy Children and Youth should be:

### 1. Raising Awareness

- Raise public awareness of child and youth health issues among all Canadians.
- Publish reports on key issues.
- Deliver an <u>Annual Report Card</u> on Child and Youth Health to the Minister of Health.

### 2. Policy Development

- Through the Deputy Minister of Health, advise the Minister of Health on the development of a Pan-Canadian Child and Youth Health Strategy.
- Advise the Minister of Health on how proposed policy and legislation will affect child and youth health.

### 3. Collaborating and Coordinating

- Have lead responsibility for an interdepartmental coordinating committee on child and youth health.
- Ideally, support a federal-provincialterritorial committee on child and youth health, reporting to the Conference of Ministers of Health.
- Act as the link between the federal government and the not-for-profit, for profit, and voluntary sectors on issues related to child and youth health.

### 4. Undertaking and Championing Research and Surveillance

 Work with the Canadian Institute for Health Information and Statistics Canada to acquire the right information on the health status of Canada's children

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"Through the National Office of Child and Youth Health, improving health outcomes for our children and youth will be kept as a national priority."



- and youth, focusing on the development of comparable health indicators and outcomes.
- Commission research independently or in partnership with the Canadian Institutes of Health Research to address knowledge gaps on health and health services for Canadian children and youth.

The focus, attitude and philosophy of this Office and its leadership are important. They must be forward-looking. They should challenge Canadians to achieve higher standards, and to genuinely seek to make Canada the number one place in the world for children to grow up, from a health perspective. It must be focused on outcomes and results – not process or funding levels. **Canada needs to become the international benchmark – not be striving to achieve that status.** 

#### Structure

### NATIONAL OFFICE OF CHILD AND YOUTH HEALTH

The Office would be located within Health Canada and would report – via the Deputy Minister – to the Minister of Health. The Office must have adequate, rolling five-year funding for the staff and premises to fulfill its mandate. The Office should have a well-defined mandate and work at a high level under the broad authority of the Deputy Minister. It should be accessible, collaborative, and accountable.

The Office should be led by a leading Canadian child and youth health advocate who is well respected by government, NGOs, and the professional sectors. The individual filling this role should be an advocate for children, with strong analytical

skills, outstanding credentials and be well-respected in the child and youth health community. They should be appointed as a senior public servant at the senior ADM level through an interchange agreement for a minimum of five years.

### ADVISORY BOARD AND YOUNG CANADIAN'S ROUNDTABLE

The Office and its head should be assisted by an Advisory Board that will represent professional organizations and NGOs concerned with the health of children and youth. The Advisory Board should consist of a maximum of 12 individuals who provide advice on relevant child and youth health issues and oversee driving the child and youth health mandate provided to the Office by the Minister of Health. Such organizations could include, but not be restricted to:

- Canadian Medical Association;
- · Canadian Paediatric Society;
- Canadian Association of Paediatric Health Centres;
- YMCA of Canada; and,
- United Way of Canada.

Relevant government institutional members might include representatives from the CIHR Institute of Human Development and Child and Youth Health. Consideration should be given to including representatives from policy and program-setting branches of Health Canada and the Public Health Agency of Canada that impact child and youth health, such as the First Nations and Inuit Health Branch, Healthy Environments and Consumer Safety Branch, Health Policy Branch, and Health Products and Food Branch, as ex-officio members.



The Board should support the mandate of the Office of Child and Youth Health and assist in the implementation of its activities. While the Board will include stakeholder organizations, it should also communicate with other stakeholders, both internal and external to government, in order to stay relevant with what Canadians view as priorities in child and youth health.

#### **TALKING TO CHILDREN AND YOUTH**

It is critical for the Senior Advisor to directly engage Canadian children, youth and parents to learn about key health priorities, existing gaps, and what approaches do - or do not - work.

To articulate the unique but critical viewpoints of children and young people about their own health, and to ensure that these perspectives inform policy and programming, a Young Canadians' Roundtable on Health should be established to serve in an advisory capacity to the Office and the Minister of Health.

### ANNUAL NATIONAL REPORT CARD ON CHILDREN AND YOUTH

The Senior Advisor will develop and provide an annual, National Report Card on the Health of Canadian Children and Youth to the Minister of Health. This report card would include health indicators, and progress with respect to Canada's international standing. The initial report card should focus on the three main issues concerning parents as articulated in this Report:

- 1. Injury prevention and safety;
- 2. Obesity and healthy lifestyles; and,
- 3. Mental health and chronic illness.

### **Proposed Work Plan**

a) Short Term (Years 1 and 2)

The mandate of the Office will allow it in the short-term to address the following:

- Creating a National Child and Youth Health Strategy;
- Focusing on Injury Prevention (Intentional and Unintentional Injuries);
- Focusing on an integrated strategy for tackling obesity among Canadian children and youth;
- Working with the Mental Health
   Commission's advisory panel on children
   and youth to address mental health
   issues; and,
- Ensuring the inclusion of, and respect for, the needs and views of First Nations, Inuit and Métis children and youth throughout the strategic development timeframe.
- b) Intermediate Term (Years 3 to 5)

In the intermediate term the Office will focus on:

- Influencing legislation, public policy and providing recommendations for necessary change;
- Ensuring the voices and opinions of children and youth are heard and their health needs are met; and,
- Promoting awareness of the need to achieve specific health outcome goals of children and youth among all Canadians.
- c) Evaluation (5<sup>th</sup> year)
- An independent and comprehensive evaluation of the National Office of Child and Youth Health should be conducted after the first five years, with the results communicated to the Minister of Health.

### CONCLUSION

Canadians were clear that they support the Minister of Health receiving independent advice that is in the best health interests of our children and youth. Through the National Office of Child and Youth Health, improving health outcomes for our children and youth will be kept as a national priority. Experts, health stakeholders and children themselves will be included in the discussion and work of this Office. Public accountability against measurable benchmarks will be protected through the National Report Card on the Health and Well-being of Children and Youth.

Through the establishment of the National Office of Child and Youth Health, the Government of Canada will guarantee a strong voice during the policy development process for one of our countries most valuable assets – our children and youth.

### **SUMMARY OF RECOMMENDATIONS**

- It is strongly recommended that Health Canada and the Government of Canada create a National Office of Child and Youth Health that reports – via the Deputy Minister – to the Minister of Health.
- The mandate of the Office should be:
  - Raising Awareness;
  - Policy Development;
  - Collaborating and Coordinating; and,
  - Undertaking and Championing Research and Surveillance.
- The Office must have adequate rolling five-year funding for the staff and premises to fulfill its mandate.
- The Office should be led by a leading Canadian child and youth health advocate who is well respected by government, NGOs, and the professional sectors.

- The Office and Senior Advisor should be assisted by an Advisory Board that will represent professional organizations and NGOs concerned with the health of children and youth.
- A Young Canadians' Roundtable on Health should be established to serve in an advisory capacity to the Office and the Minister of Health.
- The Senior Advisor will develop and provide an annual, National Report Card on the Health of Canadian Children and Youth to the Minister of Health.
- An independent, comprehensive evaluation of the National Office of Child and Youth Health should be conducted after the first five years, with the results provided to the Minister of Health.



"This Report provides a path forward. It provides a voice for the thousands of people who participated in its process and points the way for Canada to become the jurisdiction other countries try to emulate in the area of health outcomes for children and youth."

### Conclusion

This Report contains a number of bold recommendations.

Canadians, by their very nature, are bold and optimistic. The consultations for this Report challenged us to be bold, to think outside of the box, to engage in new and innovative processes, and to accept nothing less than our best efforts for the health of our children and youth. If we continue down the path we are on, doing things the same way, we will not be able to make Canada a world leader in the area of child and youth health. Many of these recommendations are forward-thinking because we need to be ambitious with our goals and challenge ourselves to do better.

The following is a summary of the recommendations contained in this Report.

### RECOMMENDATIONS ENTIRELY WITHIN THE SCOPE OF HEALTH CANADA AND THE PUBLIC HEALTH AGENCY OF CANADA

### **OVERALL**

 To better foster collaboration and networking, it is recommended that an Industry and NGO Liaison Advisory Group be established within 6 months of this Report. This advisory group would provide advice and direction to the Minister and Deputy Minister of Health on how industry, private sector companies and NGOs can best be integrated with federal government initiatives designed to impact the health of Canadian children and youth. [p. 35]

- For Canada's Centres of Excellence for Children's Well-being to be truly groundbreaking, it is recommended that:
  - They be re-focused on injury prevention, obesity, and mental illness;
  - They develop stronger relationships with NGOs and industry partners;
  - They seek to achieve world benchmarks so Canada becomes **the** world leader;
  - Their National Expert Advisory Committee should be given the responsibility for communications, public education, youth engagement, advertising, and awareness-building for all COEs;
  - They should be intimately involved in the establishment of appropriate health indicators in their fields; and,
  - They should be re-named Centres of Excellence for Child and Youth Health. [p. 51]

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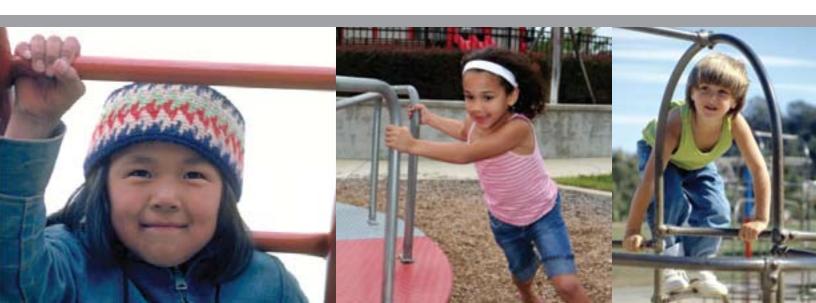


"This Report presents some sobering statistics, but also a lot of good news..."



- Regarding the Canada Prenatal Nutrition
   Program and the Canadian Action Program
   for Children (CAPC), it is recommended that
   a single department of government provide
   these programs. It is also recommended
   that the combined program be operated
   by the Public Health Agency of Canada
   given its experience in program
   delivery. [p. 52]
- It is recommended that CAPC programs work towards improving health outcomes of children and youth that are key priorities for Canadian parents. Existing CAPC programs should be provided with an opportunity to transition to these core health areas after setting priorities and performance benchmarks. This should occur within three years. If they are unable to do so, they should sunset at the end of the transition period. [p. 53]
- It is recommended that the information provided through the Canadian Health Network be amalgamated in one place, the Public Health Agency of Canada's website, in order to make both of these sites more effective and information retrieval more convenient for website visitors. Content should be reviewed and updated every month as many parents and stakeholders rely on this resource for up-to-date resource materials. [p. 55]

- Canada Research Chairs should be established for specific child and youth research in injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness. [p. 58]
- It is recommended that rigorous performance-based indicators and outcome measures be introduced into all child and youth program evaluations within the next business planning cycle, including timely public reporting on how well Public Health Agency of Canada programs and services are improving health outcomes in their target populations. It is also recommended that Health Canada and the Public Health Agency of Canada withhold creating new programs where there are existing P/T or NGO programs, and instead facilitate P/T and NGO best practices that could be implemented on a national scale. [p. 36]
- Given the current health outcome gaps between Aboriginal children and youth and the rest of the Canadian population, health performance indicators that should specifically be monitored among Aboriginal children and youth through the First Nations' Regional Longitudinal Health Survey include:
  - Life expectancy at birth;
  - Infant mortality rates;



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- Type 1 and 2 diabetes rates;
- Tuberculosis rates;
- First Nation and Inuit youth suicide rates; and,
- First Nations and Inuit children under six (on and off reserve) receiving hearing, dental and vision screening. [p. 41]
- It is recommended that the Aboriginal Head Start Program be expanded with the goal of up to 25% of Aboriginal children and youth having access to the program within five years. [p. 45]
- Working with Aboriginal communities, provinces and territories, Health Canada and the Public Health Agency of Canada should begin to develop a specific Aboriginal Children and Youth Health Strategy as recommended by the Canadian Medical Association, Canadian Paediatric Society, and the College of Physicians and Surgeon of Canada. [p. 48]
- There are challenges in ensuring that First Nations and Inuit children on reserve with disabilities have access to appropriate ancillary health services such as occupational, physical and speech therapies.
  - A pilot program is recommended which would focus on the delivery of ancillary services including physiotherapy, occupational, physical and speech therapy that would allow children under age six with lifelong complex medical needs to receive the medical services they require at home, instead of at medical foster homes or medical institutions. [p. 49]
- Brighter Futures is a universal program that reaches every First Nations and Inuit community in Canada. There are many similarities noted between these

- programs and other Health Canada and Public Health Agency of Canada programs. It is recommended that the Brighter Futures program be amalgamated into existing programs that focus specifically on injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness. [p. 47]
- A culture of service needs to be developed among the individuals involved with the surveillance programs. They must view their roles facilitating the research work that takes place "in the field," not "keepers" of the keys to the data. [p. 62]
- Overall, government departments and agencies, research entities, organizations and individuals performing data collection and surveillance need to work together to ensure that:
  - There is as little duplication of resources as possible;
  - There is full data sharing and accessibility;
  - Comparable data is collected across jurisdictions;
  - Collection of the RIGHT and relevant data takes place; via a template platform for data collection; and,
  - Data sets can be linked to maximize data collector's benefits. [p. 63]

### **Injury Prevention and Safety**

- An injury prevention advisory group should be requested to review and provide recommendations on the safety and injury prevention issues noted in this Report within 12 months. [p. 79]
- While CHIRPP is a very strong program, it needs a broader reach to meet the needs of Canadian children and youth, particularly in rural communities and the north. It is recommended that CHIRPP expand its surveillance to include



- additional community hospitals: two in suburban Canada and two in rural areas including one in Northern Canada. [p. 83]
- It is recommended that the preventable injury activities for First Nations and Inuit children and youth be amalgamated into the recommended National Injury Prevention initiative for other Canadian children and youth. [p. 47]
- That Health Canada's Health Human Resource Strategies Division establish targeted education incentives to encourage additional clinical researchers to work in this area. [p. 77]
- That CIHR's Institute of Human Development, Child and Youth Research be encouraged to sponsor a knowledge translation research call for proposals in child and youth injury prevention within the next two years. [p. 77]

### Child, Youth, and the Environment

- Toxic substances on children's toys should be banned, and a proactive mechanism of evaluation coupled with real enforcement must be implemented. [p. 90]
- Create a regulatory framework in which the evaluation of the health impact of exposure to chemical hazards such as mercury and lead is specifically looked at in the context of children and youth and not just as a subset of vulnerable populations. [p. 91]

#### **Chronic Illness and Disease**

- Currently, the Income Tax Act allows insulin pumps to be partially deducted as a medical device. It is recommended that Health Canada, through the National Diabetes Strategy, further support insulin pumps by:
  - Educating children with diabetes about insulin pumps and other prevention and treatment methods that can improve their quality of life; and,

 Developing targeted education and communications to teach children about diabetes, especially type 2 diabetes. [p. 141]

### **Reducing Childhood Obesity**

- There are numerous programs at the Public Health Agency of Canada focused on physical activity. These numerous programs should be amalgamated under the Centre of Excellence for Child and Youth Obesity (if this Centre of Excellence is established) to allow the programs to be coordinated and leveraged in a synergistic fashion to provide the greatest possible benefit for children and youth across the country. [p. 103]
- It is recommended that Health Canada and the Public Health Agency of Canada work with Canadian parents, NGOs and the private sector to reduce the rate of childhood obesity from 8% to 5% by 2015, through an emphasis on healthy eating and physical activity. Helping to implement the obesity strategy, a Centre of Excellence on Obesity should focus on:
  - Bringing new products, programs and services to market that are best practises; and,
  - The development of social marketing best practices targeted at determining messages that successfully impact the behaviours of children and youth. [p. 102]
- Similar to Canada's Food Guide, the Physical Activity Guide for Children & Youth needs to become a <u>"Fridge Favourite"</u> for parents and children. Social marketing and public awareness of this document is recommended, and should emulate that of Canada's Food Guides. [p. 107]

 It is recommended that an evaluation be completed, with First Nations and Inuit organizations, on the methods to provide remote communities with access to nutritious foods at reasonable costs including Food Mail Program and the use of traditional foods. It is recommended that this evaluation be supported by a working group. [p. 115]

### Improving Mental Health Services to Canadian Children and Youth

- A National Centre of Excellence on Mental Health and Substance Abuse among Children and Youth should be created to address the mental health issues facing Canadian children and youth. [p. 131]
- In order to immediately facilitate the creation of a National Paediatric Mental Health Access Strategy, it is recommended that the Child and Youth Advisory Committee of the Mental Health Commission of Canada establish an Expert Panel to focus on this issue in the first six months of their mandate. [p. 132]
- A national best practice program should be developed to educate people who come into regular contact with children on identifying children who are in distress. [p. 135]
- A National "Wait Time Strategy for Child and Youth Mental Health Services" should be developed in the next twelve months. [p. 132]
- Because of the lack of specialists and other ancillary health care providers in the field of mental health in Northern remote areas, it is recommended that a 'fly-in' mental health human resources pool be created. [p. 133]
- The federal government should provide specific research funds through the Institute of Neuroscience, Mental Health and Addictions (IMNHA) for immediate research

to evaluate the effectiveness of existing youth suicide prevention programs. [p. 136]

### National Office of Children and Youth Health

- It is strongly recommended that Health Canada and the Government of Canada create a National Office of Child Health that reports – via the Deputy Minister – to the Minister of Health. [p. 154]
- The mandate of the Office should be:
  - Raising Awareness;
  - Policy Development;
  - Collaborating and Coordinating; and,
  - Undertaking and Championing Research and Surveillance. [p. 155]
- The Office must have adequate rolling five-year funding for the staff and premises to fulfill its mandate. [p. 156]
- The Office should be led by a leading Canadian child and youth health advocate who is well respected by government, non-governmental organizations and the professional sectors. [p. 156]
- The Office and Senior Advisor should be assisted by an Advisory Board that will represent professional organizations and NGOs concerned with the health of children and youth. [p. 156]
- A Young Canadians' Roundtable on Health should be established to serve in an advisory capacity to the Office and the Minister of Health. [p. 157]
- The Senior Advisor will develop and provide an annual, National Report Card on the Health of Canadian Children and Youth to the Minister of Health. [p. 157]
- An independent, comprehensive evaluation of the National Office of Child and Youth Health should be conducted after the first five years, with the results provided to the Minister of Health. [p. 157]



### RECOMMENDATIONS REQUIRING HEALTH CANADA AND THE PUBLIC HEALTH AGENCY OF CANADA TO SHOW LEADERSHIP AND INVOLVE OTHER GOVERNMENTS AND/ OR SECTORS

### **OVERALL**

- of Physicians and Surgeons, the College of Physicians and Surgeons, the College of Nurses, and the College of Family Physicians, among others, create specific educational sections addressing child and youth mental health. With the Health Policy Branch at Health Canada, they should be encouraged to develop and deliver innovative training programs using a needs driven, competencies based approach that could be made available to both formal and informal providers. [p. 134]
- It is recommended that a Transition of Care Strategy and best practices be developed by the Health Human Resource Strategies Division of Health Canada in collaboration with the Royal College of Physicians and Surgeons, the College of Family Physicians and the College of Nurses. They should be encouraged to develop new fellowship and educational opportunities for undergraduate and post-graduate students in the field of transition of care for these adolescent patients. [p. 149]
- Health Canada and the Public Health Agency of Canada can show leadership by helping to establish National Standards, developing common indicators, and establishing benchmarks to be achieved. [p. 35]

### **Chronic Illness and Disease**

- Action should be taken to encourage pharmaceutical label changes for "on-label" child dosages. Clinical trial results should be reflected on product labels within six months of the trial completion. [p. 145]
- A best practice labelling program for children's products should be created. It would identify products that do not contain harmful chemicals (e.g. lead-free) and could be phased in over two years. [p. 91]

### Child, Youth, and the Environment

- The use of lead in children's toys in Canada should be restricted to:
  - 90 mg/kg total lead in all toys intended for children under the age of 3;
  - 600 mg/kg total lead and 90 mg/kg migratable lead for all children's products; and,
  - Ensure that imported toys are rigorously tested to ensure they do not exceed these levels of lead. [p. 91]
- Additional peer-reviewed research needs to be completed, or to be done, on the effect chemicals, such as lead and mercury, have on the health and wellbeing of children and youth before trends can be determined. It should:
  - Identify biological indicators of environmental substances that have or could have an impact on health outcomes of children and youth; and,
  - Identify potential hazardous materials that could impact upon the health of children and youth. [p. 89]

- Modernize legislation to better protect children from health and safety hazards associated with consumer products by:
  - Modernizing the Hazardous Products Act to more effectively protect children and youth from health and safety hazards associated with consumer products;
  - Reforming and updating the Canadian Environmental Protection Act (CEPA); and,
  - Implementing an immediate ban on all non-essential uses of mercury in consumer products. [p. 92]

### **Injury Prevention and Safety**

- Health Canada and the Public Health Agency of Canada should work with the provincial and territorial governments as well as health care experts, NGOs, and community organizations to develop and fund a 5-year national, evidence-based strategy for injury prevention in children and youth. [p. 73]
- In partnership with NGOs, the federal, provincial and territorial governments should support the creation of safety villages in all major urban centres in Canada and pilot a "safety farm" in a rural centre. [p. 75]
- It is recommended that Health Canada work with the CSA to develop helmet standards by December 2008 which will save childrens' lives. [p. 78]
- enforce industry responsibility for the evaluation of children's toys and other products prior to entry to Canada, and prior to sale to Canadian parents and children. This could be aided by an evaluation of the product flow chain, identifying earlier, appropriate times to evaluate children's toys and other products before they enter the Canadian market. [p. 78]

### **Reducing Childhood Obesity**

- It is recommended that an Industry/ NGO Liaison Advisory Group be established within 6 months of this Report to encourage industry, NGOs and government collaboration. Among other tasks, this Group should act as a facilitator with the Centres of Excellence, to help private sector partners link with NGOs, Health Canada, and the Public Health Agency of Canada programs to promote healthy eating and activity. [p. 111]
- It is recommended that:
  - There be an increase in the amount of healthy food advertising on children's programming; and,
  - There be a ban on the advertising of junk food on children's programming targeted to children under 12. [p. 113]
- The federal government should play the following role in after school initiatives:
  - Provide leadership and an action plan in this important area to alleviate parent worry and gets kids healthier;
  - Show leadership in the promotion of healthy, activity-oriented afterschool activities by setting national targets for child and youth physical activity levels and healthy weights;
  - Help in the promotion and marketing of quality after-school activities;
  - Establish national standards in programming designed to help Canadian children achieve the international benchmark in health and fitness;
  - Collect data and valuate best practices in after-school programming;
  - Foster collaboration among provincial Ministries of Health and Education, NGOs, and other organizations that provide after-school programming; and



- Leverage existing infrastructure: facilitate access to schools and community recreation facilities after school. [p. 106]
- It is recommended that food labels must be visually clear, easily interpreted and be front-of-package. The revised labelling should commence with foods that are primarily for children. A phasing-in process of two years for industry to comply is recommended. [p. 112]
- It is recommended that large chain and fast food information should, in a way that is easily accessible to the public, disclose basic nutrition facts about the food they serve on both the food packaging and on the public display board. [p. 112]

### **Chronic Illness and Disease**

 In an effort to motivate parents to protect their kids, the distribution of the National Child Benefit income supplement be linked to immunizations for children, similar to the approach being used in Australia today. [p. 144]

# RECOMMENDATIONS WITH IMPLICATIONS FOR OTHER GOVERNMENT OF CANADA DEPARTMENTS

- It is recommended that across the health portfolio an assessment of existing health programs that serve children and youth be completed to identify duplicate programs, and consolidate their management. For those few programs that are inter-departmental, central administration consolidation should be implemented. [p. 27]
- The current one-year funding model where funds arrive greater than six months into the year is unacceptable for organizations

- working to deliver programming to help children and youth. It is recommended that a specific annual timeline be produced and enforced to for distributing funding grants among child and youth programs and initiatives provided those programs and initiatives are proven to be accountable and responsible. Programs that have demonstrated appropriate due diligence and planning should be awarded three-year funding envelopes, thereby allowing them to develop and implement sustainable programs. In addition, this funding should start flowing within one month of budget approval. [p. 27]
- It is recommended that for the next business planning cycle, Health Canada and the Public Health Agency of Canada present Treasury Board with specific health outcomes to be utilized as performance measures for child and youth programming rather than process-based outcomes.
  - These health outcomes may include, but are not limited to a "zero tolerance" policy for childhood injury, a decrease in the obesity rate of children and youth to 5% by 2015, a 50% reduction in the youth suicide rate by 2015, and a decrease in the infant mortality rate to 2% deaths per 1,000 live births by 2015. [p. 28]
- Currently, First Nations and Inuit health and health-related programs for children and youth are administered by three federal departments Health Canada, the Department of Indian and Northern Affairs and Human Resources and Social Development Canada and one federal agency the Public Health Agency of Canada. It is recommended that a single department have responsibility for Inuit and First Nations child and youth health programs. [p. 42]

 Consistent with Jordan's Principle, it is recommended that provincial and territorial governments adopt a "child first" principle when resolving jurisdictional disputes involving the health care of First Nations children and youth on reserve. To expedite the administration of this recommendation in cases of potential jurisdictional dispute, the federal government should pay up front, and then recover costs through transfer payments of expenses that it would be reasonable to expect provincial governments to pay. [p. 48]

### **Injury Prevention and Safety**

- It is recommended that Health Canada and the Public Health Agency of Canada work with Statistics Canada and other data collection agencies of government to develop a mechanism to facilitate access to data similar to the National Highway Traffic Safety Administration database in the United States within the next 12 months. [p. 61]
- The Government of Canada should enact General Safety Requirement legislation by December 2008 that includes due diligence standards and updated standards for product safety, specifically domestic and imported toys and products that are primarily designed for children and youth. [p. 79]
- The Government of Canada should extend the Children's Fitness Tax Credit to include the purchase of protective helmets for activities for children and youth. [p. 84]

### **Chronic Illness and Disease**

 It is recommended that the following action take place to better inform Canadians on the clinical effects of pharmaceutical products on children and youth:

- Establish a Canadian paediatric clinical pharmacological network;
- Commit to a dedicated research competition for drug research in children;
- Develop a Canadian national children's formulary as a web-based resource; and,
- Provide the pharmaceutical industry
  with an additional six months of patent
  protection for pharmaceutical products
  if pharmaceutical companies can
  demonstrate they are conducting
  product research that impact on
  children and youth. [p. 145]
- Strengthen the protection and monitoring of groundwater sources to reduce the potential exposure to chemical hazards such as mercury, lead, PCBs, dioxins, and polybromonated diphenyl ethers. [p. 92]
- To gain a better understanding of environmental impacts on children's health, it is strongly recommended that the Government of Canada support the development of a minimum ten year, longitudinal cohort study which encompasses the fetus at pregnancy to children 8 years of age. [p. 57]

### **Reducing Childhood Obesity**

- Over the next two years, the Children's Fitness Tax Credit should be evaluated for its effectiveness in improving the activity levels of Canadian children and youth as recommended by the Expert Panel on the Children's Fitness Tax Credit. [p. 108]
- It is recommended that a nonrefundable tax credit for participation of Canadians in certified coaching programs be introduced. [p. 108]



### **Disabilities**

- A Physical Activity Guide for Children and Youth with Disabilities must be developed by the Public Health Agency of Canada in conjunction with organizations such as Special Olympics Canada, and established children's rehabilitation facilities across the country (e.g. Bloorview Kids Rehab). [p. 119]
- An incentive fund should be provided for community groups, NGOs and children's rehabilitation centers such as Special Olympics Canada, Bloorview Kids Rehab and the YMCA to create and operate physical activity programs targeting disabled children and youth. [p. 119]
- It is recommended that Finance Canada consider establishing a coaching tax credit to support coaching and training of key personnel who coach children and youth with disabilities. [p. 119]
- There should be an expansion of Fitness and Life Skills Centres – and support for existing facilities and infrastructure – such that they are present in every region of the country. [p. 120]
- It is recommended that income splitting be allowed for parents of children or youth under 18 years of age with physical or intellectual disabilities (as defined by the *Income Tax Act*). [p. 120]
- It is recommended that an 'innovation' tax incentive be created to encourage industry to innovate and develop technologies that improve the daily function of children and youth with disabilities (e.g. more ergonomic wheelchairs to improve daily function). [p. 121]
- In order to simplify access to services, it is recommended that Health Canada and the Public Health Agency of Canada fund a 'disability hotline' and public

- website that would, with one number and a single web link, help parents and children connect with the activities and programs they need. [p. 121]
- All governments should develop incentives to encourage individuals to work with children and youth with disabilities.
   Summer scholarships should be made available to small business owners and non-governmental organizations to encourage the employment of youth with physical and mental disabilities such that these children can participate in part-time and summer job opportunities. [p. 121]

### **Chronic Illness and Disease**

- Canada is currently experiencing a tuberculosis (TB) epidemic in our northern, Aboriginal communities. This is almost unprecedented world-wide in this quarter century. Rates of tuberculosis in northern communities are four times the national average and the number of infections are increasing. As active tuberculosis is contagious, it is recommended that surveillance and treatment programs be funded and implemented to ensure that all Canadian children and youth at risk of exposure for TB are tested and treated by public health nurses, so that this TB epidemic is stopped before further spread is encountered. [p. 44]
- The compassionate care benefit currently provided for up to six weeks through HRSDC should be increased to up to 12 weeks for the primary caregiver of chronically ill children and youth, in order for these parents to spend time with their children in the last days of their lives. [p. 138]

### RECOMMENDATIONS REQUIRING FEDERAL, PROVINCIAL AND TERRITORIAL INVOLVEMENT

### **OVERALL**

- It is recommended that support be provided to increase both the quantity and scope of paediatric surveillance activities across the country in key areas

   injury prevention and safety, obesity and healthy lifestyles, and mental health and chronic illness especially among rural and ethnic populations. [p. 59]
- Each jurisdiction is developing indicators with the goal of creating comparable indicators that will be reported by each jurisdiction. It is recommended that all levels of government and organizations focused on child and youth health reach consensus on a separate section of national indicators for children and youth, consistent with Canada's national comparable indicator reporting by December 2009. This will allow for the development and measurement of pan-Canadian goals for child and youth health. [p. 16]

### **Injury Prevention and Safety**

- British Columbia, Newfoundland and Labrador and Ontario are to be commended as they have recently introduced life-saving booster seat legislation. All other provinces and territories are encouraged to implement similar legislation in the next 12 months, which would make booster seats mandatory for children aged 4-8 until they weigh 36-45 kg (80-100 lbs) or until they are 132-145 cm (52-57 inches) in height. [p. 78]
- National standards for medication tracking in Canadian paediatric health care institutions should be created. [p. 82]

### **Reducing Childhood Obesity**

- It is recommended that the Joint
   Consortium for School Health focus its
   initial efforts on physical activities and
   nutrition within the school setting. They
   are encouraged to work in collaboration
   with the Canadian Association for Health,
   Physical Education, Physical Activity, and
   Dance to identify and evaluate best practices
   that can help reduce obesity. [p. 54]
- It is recommended that reciprocal joint-use agreements be developed that cover the joint use of schools and municipal facilities so that schools can use municipal facilities and sport and recreation departments can use school facilities after school hours. [p. 106]
- It is recommended that the Joint Consortium for School Health develop a working group with nutrition related NGOs and industry to facilitate the introduction of their programs into schools across Canada. [p. 114]
- It is recommended that F/P/T jurisdictions work to obtain a 20% increase in the proportion of Canadians who are physically active, eat healthily and are at healthy body weights. [p. 102]

### Improving Mental Health Services to Canadian Children and Youth

 Each refugee child aged 16 and under should receive a mental health assessment upon entering Canada. [p. 134]

### **Chronic Illness and Disease**

It is recommended that guidelines be created for newborn and first year of life screening standards. [p. 145]



- It is recommended that a best practice National 'Five Senses' Child Screening Report Card be developed in collaboration with the provinces, territories and NGOs. This Report Card will provide parents with their child physical record of audiology, optometric and dental screenings and treatments, as well as immunizations and developmental milestone exams. [p. 146]
- It is recommended that legislation similar
  to Sabrina's law be implemented across the
  country such that no child will ever die in a
  Canadian school due to an allergic reaction.
  It is also recommended that legislation
  be passed to allow diabetic children and
  youth to keep their insulin, the delivery
  mechanism for the insulin and glucose
  monitoring devices in the classroom. [p. 139]
- It is recommended that we all ensure that there are no economic barriers to Canadian children and youth accessing dental services. Dental services should be included as a necessary part of child screening programs and the recommended National Child Screening Report Card. [p. 148]
- It is recommended that F/P/T governments ensure that they appropriately support optometric eye examinations for children and youth in their respective jurisdictions and include them as a necessary part of developmental surveillance such that there is no economic barrier to a child receiving a screening exam. [p. 148]

### **IN CLOSING**

This Report presents some sobering statistics, but also a lot of good news. The sobering statistics indicate that the health and long-term wellbeing of too many Canadian children are at risk. That's bad for them, and it's bad for Canada. While the problems facing our children and youth are not simple or easily fixed, there is good news.

The good news is that there are many things that all levels of governments, NGOs, organizations, and we, as individuals, can do to positively impact our children.

There is no other country in the world that has the resources, talent and the potential that Canada has. It will take planning. It will take action. It will take the desire to change longstanding systems. And most importantly, it will take commitment.

This Report provides a path forward to do just that. It provides a voice for the thousands of people who participated in its process and points the way for Canada to become the jurisdiction every other country in our global community will try to emulate in the area of health outcomes for children and youth.

We all have a responsibility to improve the health of all Canadian children and youth. We all can play a part in giving them a better life. We all can help healthy, active children grow into healthy, active adults. And <u>action</u> must be taken to help our country – and our children – to achieve these important goals.



# **Appendices**

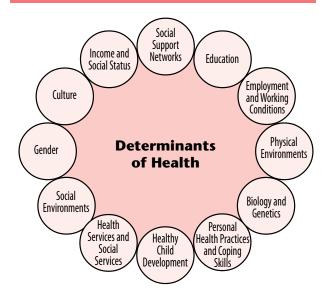
# I. SOCIAL DETERMINANTS OF CHILD AND YOUTH HEALTH

"'Health' is inseparable from poverty and issues around inadequate and unaffordable housing. As a country, we need to start addressing the social determinants of health and the income gap, that just continue to grow wider."

A look through the lens of social determinants of health tells us a lot about our children and the many issues impacting and therefore affecting Canadian children and youth. The healthiest populations are those in societies – largely OECD countries – which are prosperous and have an equitable distribution of wealth.

There are varied categorizations of social determinants of health; within each determinant there is often much discussion - and disagreement - over how it should be measured. The World Health Organization looks at 12 social determinants of health. There are numerous other reports and studies that examine, in detail, other social determinants of health in Canada. While the mandate of this Report does not extend that far, it is important to reference the three social determinants that affect child and youth health that were raised repeatedly during the roundtables: poverty, housing and education.

### **DETERMINANTS OF HEALTH<sup>168</sup>**



Source: World Health Organization, undated.

#### I. POVERTY

Poverty is a key social determinant of health. A lengthy list of health-related issues among children correlate with poverty, including higher rates of unintentional injuries, mental health issues, poor eating habits, and less physical activity. Low-income Canadians are more likely to die earlier and to suffer more illnesses than Canadians with higher incomes, regardless of age, sex, race and place of residence.<sup>169</sup>

Levels of child and youth poverty can be measured in a number of ways. The UNICEF Innocenti Research Centre Report Card comments that "Child poverty can be measured in an absolute sense – the lack of some fixed minimum package of goods and services. Or it can be measured in a relative sense – falling behind, by more than a certain degree, from the average standard of living of the society in which one lives." While Statistics Canada is careful not to refer to the low income cutoffs (LICOs) as "the poverty line", the LICO is



the most widely used measure to define child poverty rates. While Canada ranks a respectable 6th out of 21 OECD nations in terms of child and youth material well-being as measured by UNICEF,<sup>171</sup> one in six children and youth in Canada – approximately 1,071,000 – live in poverty, including 778,000 Canadian children living in low-income families.

And while poverty levels in some parts of Canada are improving, others are not.

One of the best ways for Canada to tackle poverty is to get more people participating in the economy – which begins with good health and education among our children and youth. Children and youth who have had a healthy start to life – through access to a variety of affordable, healthy foods, education programs and affordable, community-based physical education programs – are more likely to stay and be successful at school, and enter the job market and be successful in their chosen profession later in life. Positive parenting, high quality child care and nurturing neighbourhoods can also help mitigate effects of low socio-economic status.<sup>172</sup>

#### II. HOUSING

In 1986, the Ottawa Charter for Health Promotion recognized shelter as a basic prerequisite for health.<sup>173</sup> **Research has demonstrated that living in substandard housing and poor neighbourhoods has both a direct and indirect impact on child and youth health.** For example, children who experience overcrowded housing conditions have an increased likelihood of experiencing infectious disease.<sup>174</sup> Studies have shown the negative effect of inadequate heating and dampness on health, particularly for children and the elderly, who develop an increased incidence of infection in these circumstances.<sup>175</sup>

A lack of adequate and affordable housing can aggravate other problems associated with low income. Individuals and families who are forced to spend a disproportionate amount of their income on rent often face food insecurity and thus malnutrition, and are unable to participate in healthy community activities such as active recreation and children's social programs. Families have to make difficult choices between money for transportation to work, clothing, school supplies and often food. This is exacerbated in remote locations (such as the north) where products – including food – tend to be more expensive.

One also needs to examine housing in the context of neighbourhood. If neighbourhoods have a higher tendency towards gang or other violence, parents are less likely to want their children to play outside, and children themselves are less likely to want to play outside. This results in less outdoor physical activity which leads to less healthy lifestyles and poorer health outcomes. Due to these phenomena, Canada's urban centres are at risk of a 'downward spiral'. Many North American sociologists have argued that once 40 % of a neighbourhood's population falls below the poverty line, the entire neighbourhood becomes distressed - endangering the health of the entire community.<sup>176</sup>

The issue of housing in Canada also has regional and social disparities. According to the 2007 Child Health Summit, "Living conditions for First Nations people rank 63<sup>rd</sup> in the world — comparable with developing countries — and one of the root causes of poor health in these communities. Overcrowded housing, mould and unsafe drinking water help spread communicable diseases at a rate 10 to 12 times higher than the national average. Over 40% of homes are considered inadequate shelter."

If one accepts the premise that housing both directly and indirectly affects health outcomes, then we, as a society, need to find better ways of ensuring that the lack of suitable housing is not an impediment to success.

#### III. EDUCATION

Every day over 1,000 children are born in Canada. They are lucky. There are few – if any – better places to be born and get a good education.

Education is closely tied to socioeconomic status, and effective education for children and lifelong learning for adults are key contributors to health and prosperity for individuals, and for the country. People with higher levels of education have better access to healthy physical environments and are better able to prepare their children for school. They also tend to smoke less, to be more physically active and to have access to healthier foods.

Children who have had the benefit of early childhood education programs experience benefits that persist later in life. These benefits include better school performance and lower juvenile crime rates. Providing quality, clinicallytested education is extremely important in a child's formative years. In particular, experiences from conception to age six have the most important influence of any time in the life cycle on the connecting and sculpting of the brain's neurons.<sup>178</sup> Positive stimulation early in life improves learning, behaviour and health into adulthood. The YMCA's 'Play to Learn' program is a wonderful example of a program that recognizes the importance of starting positive stimulation early.

Canada is fortunate to have internationally-recognized experts in Early Childhood Development (ECD) to inform the public policy discussion. In March 2007, the Council for Early Child Development released the much-anticipated follow-up report to The Early Years Study entitled, "Early Years 2: Putting Science into Action." 179

The Early Years Study had clearly demonstrated how children's experiences in the early years directly impact their neurobiological development and the formation of coritcocortical connections; once these neural connections are formed, they are difficult to modify later in life making it challenging to alter a child's developmental trajectory. The Early Years 2 Study builds on its predecessor, with eight more years of neuroscientific research demonstrating the positive correlation between ECD and a child's neurological development. Both studies are clear: if we want Canadian children to be successful and competitive later in life, we must do everything we can to stimulate their early development.

## **Investing Early Pays Off Later**

It has been repeatedly demonstrated that investments in early childhood education pay off in better life and health outcomes later in life. ECD research estimates that every \$1 invested in early childhood development is worth \$3 - \$18 later in life. 180

The benefits of ECD have been clearly demonstrated in evidence-based research and include:

- Higher intelligence scores;
- Higher and timelier school enrolment;
- Less grade repetition and lower dropout rates;
- · Higher school completion rates;



- Improved nutrition and health status;
- · Improved social and emotional behaviour;
- Increased earning potential and economic self-sufficiency as an adult; and,
- Increased female labour force participation.<sup>181</sup>

The economic and societal benefits of ECD reflect both savings to social services, and increased economic productivity. Individuals who complete high school and then pursue further education have an opportunity to contribute more significantly to Canada's economy, and to advance the national interest. The correlations between improved nutrition and health status with decreased use of health care services and social services are well known

### Literacy

On the whole, young people today have higher levels of education than the previous generation. The International Adult Literacy Survey found nearly one-third of Canadian youth to have among the highest level of literacy skills among reporting countries. 182 Canada has also seen significantly lower drop-out rates in schools than there were in the 1990s, suggesting that programs that have been put in place to improve literacy are working. 183

# FOCUS OF THIS REPORT: HEALTH ITSELF

The social determinants of health are central to the challenges that Canadian children and youth face with respect to their health. As stated previously, it is within Canada's grasp to be the best place on earth for a child to grow up in, but we have work to do in order to achieve this goal. The three determinants outlined

above, provide some of the challenges that children and youth face. These determinants serve as important reminders that child and youth health cannot be evaluated within the single silo of health, nor the silo of poverty. The multiple factors that impact a child's development and environment all must be taken into account when evaluating their health status.

# II. ADDITIONAL HEALTH INDICATORS

Countless reports, expert panels and organizations have made recommendations regarding the health indicators that should be used to best measure and improve child and youth health outcomes. In their report, "Improving the Health of Young Canadians: Canadian Population Health Initiative," the Canadian Institute for Health Information (CIHI) measured five assets for children and youth: parent nurturing, parental monitoring, volunteering, peer connectedness (involvement in the community) and school engagement.<sup>184</sup> CIHI is also working with the Canadian Child and Youth Health Coalition (CCHYC) to lay the groundwork for the Coalition's Health Indicator program.<sup>185</sup> The objectives of this program are to identify existing indicators and develop new indicators that will be used to monitor and evaluate the health of, and the health services provided to, infants, children, youth, and their families. The CIHI Health Indicators Framework has been adopted as the basis for this project.

In addition, the CIHR's Institute of Human Development, Child and Youth Health has requested submissions for research in the field of child health indicators. This request follows a symposium by CAPHC in 2006 focusing on this subject.

Other child and youth indicators for specific health outcomes have been recommended by organizations such as the Canadian Paediatric Society, Breakfast for Learning (nutrition)<sup>186</sup> and Active Healthy Kids Canada (physical activity).<sup>187</sup>

# ADDITIONAL HEALTH INDICATORS TO CONSIDER

There are a number of additional indicators that should be considered for measurement nationally and by each jurisdiction. These include:

- Perinatal mortality
- Blood lead levels in children and youth
- Prevalence of Type 1 and Type 2 diabetes
- Prevalence of Asthma
- Hospitalization due to Asthma or respiratory illness (under 5, 5 – 18 years)
- Rates of STI and HIV diagnosis (15 – 18 years)
- Suicide among children and youth
- Alcohol rates among youth
- Self-rated health
- Type of Smoking (e.g. occasional, daily)
- Smoking initiation
- Exposure to second hand smoke at home, in vehicles and in public places
- Frequency of drinking
- Leisure time physical activity
- Body Mass Index
- Immunization coverage
- Leukaemia (5-year survival)
- Child transportation safety
- Exposure to hazardous noise

It is only by specifically considering a broad range of **measurable** health indicators in the context of child and youth health, that we as a society will be able to appropriately compare child and youth health outcomes with similar jurisdictions and begin, as early in life as possible, to address the root causes of adverse health effects.

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- http://www.unicef-icdc.org/presscentre/presskit/reportcard7/rc7\_eng.pdf
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