

# EpiNorth

The Northwest Territories Epidemiology Newsletter

**Elsie De Roose,**  
Team Leader,  
Health Promotion  
Department of Health &  
Social Services

**Trish Fitzpatrick,**  
Regional Nutritionist  
Yellowknife Health and  
Social Services Authority

## School Children: Inactive and Overweight – An Alarming Trend

The alarming increase in the rate of childhood obesity has recently received much media attention.<sup>1,2,3,4,5</sup> This has helped to highlight the increasing number of inactive, overweight children in industrialized countries.

This is the first of two articles reviewing Canadian and NWT statistics and current causes and concerns about body weight, nutrition and inactivity in children. The second article, to be published in a coming issue of *EpiNorth*, will focus specifically on nutrition and school performance.

### Inactive and Overweight Children – A Potential Crisis

Physical activity statistics available from the *Canadian Community Health Survey, 2000/01*<sup>6</sup> provide information on 12 to 19 year olds. Although 43% of children and youth were reported as being active, 31% were considered inactive. This is consistent with the national average of 32% (see *Table 1*).

**Table 1 – Physical Activity Index Age 12 – 19, NWT and Canada, 2000/01**

	Total		Physical Activity Index			
	(N)	%	Active (%)	Moderate (%)	Inactive (%)	Not stated (N)
<b>NWT</b>						
12 – 19	3,752	100	43%	26%	31%	1,585
<b>Canada</b>						
12 – 19	2,823,725	100	44%	24%	32%	414,033

Source: Canadian Community Health Survey, 2000/01  
Planning, Accountability and Reporting Division, H&SS, GNWT

Data on body weights of children and youth were not readily available at the time of writing; however, body mass indexes for the next nearest category, the 20 to 34 year age range, were available. It is reasonable to expect that the percentage of obesity in children and youth may parallel that of the population between the ages of 20 and 34. In *Table 2* we see that in the NWT, rates of overweight and obesity were 18% and 17% respectively, compared to 13% and 12% for the rest of Canada.

**Table 2 – Body Mass Index by Age Group 20 – 34 NWT and Canada, 2000/01**

	Total		Physical Activity Index					Not stated (N)
	(N)	%	Underweight (%)	Acceptable Weight (%)	Some Excess Weight (%)	Overweight (%)	Obese (%)	
<b>NWT</b>								
20 – 34	9,890	100	8*	42	14	18*	17*	608
<b>Canada</b>								
20 – 34	6,035,927	100	13*	49	13	13*	12*	

Source: Canadian Community Health Survey, 2000/01  
Planning, Accountability and Reporting Division, H&SS, GNWT

\*Statistically significant difference between the NWT and the rest of Canada in corresponding age category (P<0.05)

continued on page 16

## IN THIS ISSUE

- 2 Editor's Notes
- 3 The PIRC Report
- 4 Brighter Futures in the NWT – An Overview
- 6 The Public Health Approach to Injury Control
- 10 Nurse Practitioner Education
- 12 A Health & Social Services Call Centre in the NWT
- 14 Evaluating Health Information on the Internet
- 19 **CONFERENCES** & workshops
  - CPHA Conference
- 20 **NOTIFIABLE** diseases

## HOW TO REACH EpiNORTH

Letters to the editor and articles are welcome but may be edited for space, style and clarity. Please contact the Managing Editor for article guidelines. All submissions must be sent electronically.

Tel: (867) 920-8946  
Fax: (867) 873-0204

E-mail  
epi\_north@gov.nt.ca

Internet Access  
www.hlthss.gov.nt.ca

Mail  
Planning, Accountability  
and Reporting  
Health & Social Services  
CST 6  
Government of the NWT  
Box 1320  
Yellowknife, NWT  
X1A 2L9

Martha Lamon  
**Managing Editor**

André Corriveau, MD, FRCPC  
**Scientific Editor**

### EDITORIAL BOARD

Joyce Bourne  
Cheryl Case  
Elsie DeRoose  
Tami Johnson  
Sandy Little

*EpiNorth* is a publication of the GNWT Department of Health and Social Services. Inclusion of material in *EpiNorth* does not preclude publication elsewhere. Views expressed are those of the author and do not necessarily reflect departmental policy. Permission is granted for non-commercial reproduction provided there is a clear acknowledgment of the source.

## Editor's Notes

**Martha Lamon,**  
**Managing Editor,**  
**EpiNorth**  
**Department of Health &**  
**Social Services**

Welcome to another issue of *EpiNorth*. This issue includes a variety of articles primarily from staff at the Department of Health & Social Services. The diversity of their articles speaks to the range of challenges clients, care providers and policy makers face when it comes to staying healthy or the provision of health-related services. While many health indicators show that our northern population is sicker and doesn't live as long as our southern counterparts (see Dave MacDonald's article on the *PIRC Report*, p. 3), there are many positive steps being taken to address health concerns in the NWT. Many of the articles in this issue of *EpiNorth* demonstrate this.

Elsie DeRoose and Trish Fitzpatrick, both nutritionists with a wealth of experience in their field, have provided us with a timely look at the problem of inactivity and overweight among children in the NWT and North America in general. They give ideas on how to address the problem as well as share information on activities underway in the NWT that promote healthy eating and active living.

Dave MacDonald's summary of *Report to Residents of the Northwest Territories on Comparable Health and Health System Indicators (The PIRC Report)* highlights indicators that report on health status, health outcomes, and quality of health service. Dave's experience and lengthy service as a senior health analyst at the Department make him particularly suitable to penning such a report.

Jasmin Mirza, Wellness Planner with the Department of Health & Social Services, has provided us with an overview of funding allocations and Brighter Futures programming for the 2001/02 year. Jasmin has been with the Department for approximately one year. She comes to us having recently completed her PhD in sociology from Bielefeld University,

Germany. Her dissertation analyzed the societal changes that the increasing entry of women into traditionally male occupations has caused in urban Pakistan. Her dissertation, titled *Between Chaddor and the Market: Female Office Workers in Lahore*, has just been published by Oxford University Press (2002).

Anthony Leamon is a senior health analyst with the Department and has written an article outlining the Haddon Matrix. This is a useful framework for planning injury control strategies. As stated in Dave MacDonald's article, between 1997 and 1999, the average rate of potential years of life lost due to unintentional injuries in the NWT was almost double that of Canada. Injury control is a serious issue in the NWT. The Department will be releasing a report on injuries in the NWT in the coming months.

Elizabeth Cook and Karen Graham are nurse practitioner instructors at Aurora College. They provide us with some background to the role of nurse practitioners as well as an overview of the NP program at Aurora College.

Sheila Sears, Manager of Primary Community Services, provides a look at steps taken to implement the 1-800 family health and social supports call centre identified in the Department's Action Plan. The Action Plan spans the years 2002 to 2005 and is a commitment to actions that will improve the health and well-being of Northerners and ensure a better system of care.

Alana Kronstal, a Health Education student at Dalhousie University, spent the summer with the Department in the Health Promotion Unit. She provides tips about how to review health information on the Internet.

Readers outside of the NWT will notice that their copy of *EpiNorth* (as well as the Summer issue) includes an insert requesting verification that they want to continue receiving the newsletter. This is an attempt to update our database of readers and to delete any addresses

*continued on page 6*

# The PIRC Report: Summary of Report to Residents of the Northwest Territories on Comparable Health and Health System Indicators

David MacDonald,  
Senior Health Analyst  
Department of Health &  
Social Services

The purpose of the *Report to Residents of the Northwest Territories on Comparable Health and Health System Indicators* is to fulfill a commitment made by the federal/provincial/territorial (FPT) First Ministers to provide clear accountability reporting to Canadians. The First Ministers directed their Ministers of Health to develop a set of indicators that could be used to provide comprehensive and regular public reporting on health status, health outcomes, and quality of service.

The FPT Ministers of Health established an FPT committee called the *Performance Indicators Reporting Committee* (PIRC) to develop the framework of jointly agreed to indicators in the following 14 areas:

## Health Status

- Life expectancy
- Infant mortality
- Low birth rate
- Self-reported health

## Health Outcomes

- Change in life expectancy
- Improved quality of life
- Reduced burden of disease, illness and injury

## Quality of Service

- Waiting times for key diagnostic and treatment services
- Patient satisfaction
- Hospital re-admission for selected conditions
- Access to 24/7 first contact health services
- Home and community care services
- Public health surveillance and protection
- Health promotion and disease prevention

The *health status* indicators are meant to reflect the overall health of the population in the NWT, while the *health outcomes* indicators are intended to reflect the impact of the health system on population health and well being. The *quality of service* indicators offer a perspective

of several aspects of the quality of services available to the population.

## Highlights<sup>2</sup>

Life expectancy at birth in the NWT was an average of 76.2 years between 1997-99, with life expectancy for women being about six years longer than for men. Disability-free life expectancy at age 65 was 10.4 years in the NWT in 1996, compared to 11.7 years for Canada.

Overall, 54% of the population age 12 or older rated their health as excellent or very good in 2000-01, but only 18% of elders (age 65 and over) gave their health an excellent or very good rating.

A 2000-01 survey found that 93.1% of NWT residents were very satisfied or somewhat satisfied with hospital services compared to 79.5% of Canadian residents.

Between 1997 and 1999, the average rate of death due to lung cancer was 70.9 deaths per 100,000 population for the NWT compared to 49.3 deaths per 100,000 for Canada.

Between 2000 and 2002, the forecasted rate for prostate cancer is predicted to average 53.6 cases per 100,000 for the NWT, compared to 118.2 cases per 100,000 for Canada.

Between 2000 and 2002, the forecasted rate for colorectal cancer is predicted to average 81.1 cases per 100,000 for the NWT, compared to 49.5 cases per 100,000 for Canada.

Between 1997 and 1999, the average rate of potential years of life lost due to unintentional injuries was 1,309.2 per 100,000 compared to 696.6 per 100,000 for Canada.

After peaking at an average of 68.7 cases per 100,000 between 1994-96, the incidence of tuberculosis dropped to an average of 26.4 cases per 100,000 between 1999-01. This compares to an average of 23.5 cases observed in 1991-93.

In 2000-01, almost 40% of the population age 20 and older reported being exposed to

*continued on page 11*

Jasmin Mirza, PhD  
Wellness Planner  
Wellness, Planning and  
Development  
Department of Health and  
Social Services

## Brighter Futures in the Northwest Territories – An Overview

### Introduction

The Brighter Futures program is a federally funded wellness program for First Nations and Inuit communities. It has been implemented in the Northwest Territories since the early 1990s. Its overall purpose is "to improve the quality of, and access to, culturally sensitive wellness services at the community level to help create healthy family and community environments in which children and all community members can thrive."<sup>1</sup> Although Brighter Futures is intended specifically for First Nations and Inuit children from age 0 to 6, it is recognized that children's needs cannot be separated from those of their families and community.<sup>2</sup> Therefore, funds also support activities and programs that target youth, adults, families, or the community at large.

Community-based programs that fit into one of the following components of the Brighter Futures program are eligible for funding:

- Community Mental Health
- Child Development
- Injury Prevention
- Healthy Babies
- Solvent Abuse
- Parenting Skills

These six components are only broadly defined; a great variety of programs can be funded through Brighter Futures.

### Brighter Futures in the Northwest Territories

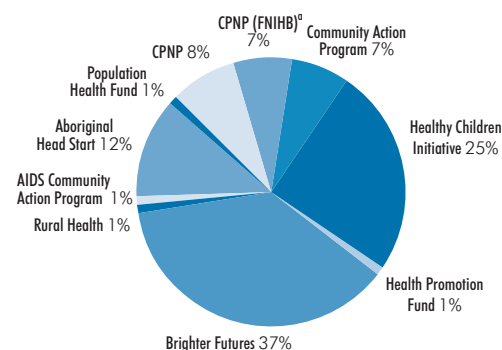
In the NWT, the Department of Health and Social Services administers the Brighter Futures program on behalf of Health Canada. Budget allocations are calculated on the basis of First Nations/Inuit population in a community and the cost-of-living index. At present, the GNWT administers separate contribution agreements with 26 Bands and the Inuvialuit Regional Corporation.

Brighter Futures is a community-based wellness

program, which also means that the community decides how Brighter Futures funds are allocated. In most cases, it appears that the Band Chief and Councilors decide which projects and activities the Brighter Futures program will fund, with varying degrees of involvement of the Band Manager, the Brighter Futures Co-ordinator (if one exists), and other community members. In some communities, community-based organizations and groups submit proposals (or informal requests) to the Band for funding under Brighter Futures. If their requests are approved, funds are forwarded to these organizations/groups. In other communities, the Band keeps the funds and implements its own wellness programs. Combinations of these two practices are even more common.

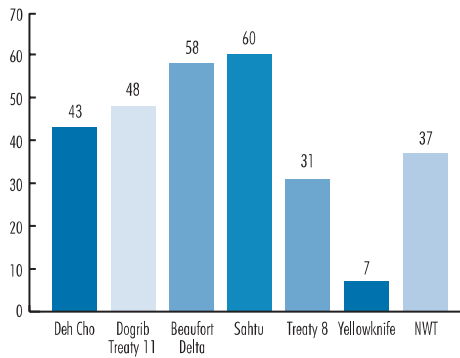
Funding through Brighter Futures is guaranteed as long as the Band/Community Corporation submits a proposal or workplan to the GNWT outlining how the allocated budget will be used in a fiscal year. During the past years, the Brighter Futures budget for the Northwest Territories has remained stable at about \$3 million per fiscal year. Of the 11 territorial and federal wellness programs implemented in the Northwest Territories in 2001/02,<sup>3</sup> Brighter Futures had the highest budget, providing 37% of the overall wellness funding (see *Figure 1*). In some regions (Sahtu, Beaufort Delta) the Brighter Futures program even provided more than 50% of the wellness funding (see *Figure 2*).

**Figure 1: Wellness Initiatives in the NWT 2001/02**



<sup>o</sup> Canada Prenatal Nutrition Program (First Nations and Inuit Health Branch)

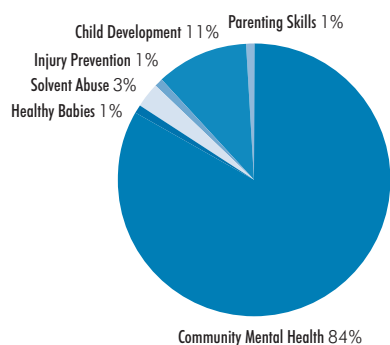
**Figure 2: Percentage of Brighter Futures Dollars in Relation to Overall Wellness Funding 2001/02**



**Brighter Futures Activities in 2001/02<sup>4</sup>**

In the last fiscal year, Brighter Futures funded or co-funded about 300 programs, activities and positions in 30 communities of the Northwest Territories. *Figure 3* illustrates that, in spite of Brighter Futures being an early childhood development program, only 12% of the funds were actually spent on early intervention programs and activities.<sup>5</sup> As stated earlier, funding criteria are flexible enough to allow communities to target funds according to their needs. Communities set clear priorities in the area of community mental health; this is where most of the Brighter Futures program funds (84%) were spent. This is in recognition of the fact that children’s mental health is closely tied to family and community wellness.

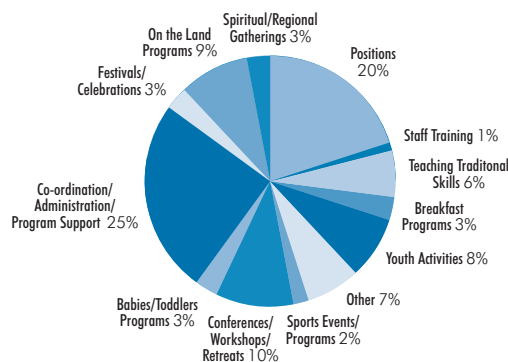
**Figure 3: Brighter Futures Expenditures per Component 2001/02**



*Figure 4* provides an overview of the projects and activities that were implemented under

Brighter Futures in 2001/02. It shows that communities use Brighter Futures funds to support a broad range of programs and activities targeting all age groups. These projects range from breakfast programs to sports events, youth activities, conferences/workshops, on-the-land programs, and community festivities.

**Figure 4: Brighter Futures Funded Activities in the NWT 2001/02**



One-fourth of the Brighter Futures budget was spent on program co-ordination, administration and support for three reasons: First, Brighter Futures funds support a relatively large number of small projects and initiatives at the community level. In the last fiscal year, in almost 40% of the communities, 10 or more (up to 34!) projects were funded or co-funded through Brighter Futures. Therefore, many Bands/Community Corporations use Brighter Futures funds to hire a staff member for the co-ordination of Brighter Futures in their community. Second, although hired as *Brighter Futures Co-ordinators* these employees often fulfill a range of other duties, such as co-ordinating other wellness programs, providing counseling services, etc. The impact these additional services have on the community might not always be tangible but it can nevertheless be assumed that they positively influence community wellness. Third, in regions where regional Aboriginal organizations or Health and Social Services Authorities are involved in the co-ordination of Brighter Futures, as was the case in two regions in 2001/02, a

*continued next page*

part of the regional Brighter Futures budget is used for regional co-ordination.

### Program Strengths and Weaknesses

The advantages of the Brighter Futures program are manifold. Funding is guaranteed and, compared to other wellness programs, Brighter Futures provides communities with significant resources. Since the objectives of Brighter Futures are very broadly defined, communities can set their own priorities and use the funds flexibly for a variety of programs and activities.



It seems that the objectives of the Brighter Futures program and the definition of its primary target group, children age 0 to 6, are not always clear to program co-ordinators and those who decide on how the budget will be used. This observation is based on discussions with Brighter Futures Co-ordinators, a review of proposals and an analysis of how funding has been spent, and might explain the allocation of relatively few resources to early intervention programs and activities.

To strengthen the Brighter Futures program further, more focus needs to be placed on

capacity building of community-based program co-ordinators in the areas of program planning, budgeting, proposal and report writing, and monitoring and evaluation.

### REFERENCES

- 1 Health Canada. Program Framework for the First Nations and Inuit Component – Brighter Futures Child Development Initiative. Ottawa: undated.
- 2 Government of Canada. Federal/Provincial/Territorial Early Childhood Development Agreement: Report on Government of Canada Activities and Expenditures 2000-2001. Ottawa: 2001.
- 3 Territorial wellness programs were the Health Promotion Fund (Dept. of Health and Social Services) and the Healthy Children Initiative (Dept. of Education, Culture and Employment). Federal wellness programs were Brighter Futures, Canada Prenatal Nutrition Program (general population and Aboriginal funding), Aboriginal Head Start, Aids Community Action Program, Community Action Program for Children, Community Animation Program, Hepatitis C Prevention, Support and Research Program, Rural Health, and Population Health Fund. For more detailed information on these programs in the NWT see: Northwest Territories “Community Wellness in Action 2001/02, Summary Report of Wellness Initiatives”. Department of Health and Social Services, GNWT (forthcoming).
- 4 The figures used in this section have been derived from year-end activity and unaudited financial reports submitted to the GNWT by Bands, regional Aboriginal organizations and Health and Social Services Authorities.
- 5 The figure given for child development programs (11%) includes programs for children slightly older than 6 years of age.

---

*Editor's Notes...continued from page 2*

that are no longer up to date. Please be sure to fax, phone or email your reply so you stay on the mailing list. If you've done this already – thank you. If your copy does not have the insert – don't worry. It means you are automatically staying on our list.

A final note is regarding the Notifiable Diseases section of the newsletter. The reporting of HIV infections may have been somewhat confusing over the last few issues. Please note that since the Summer 2002 issue, HIV infections are being reported from 1987 onward in accordance with the current boundaries of the NWT.

*Read in good health!*

*Martha Lamon*

# The Public Health Approach to Injury Control

Anthony Leamon,  
Senior Health Analyst  
Planning and  
Accountability  
Department of Health &  
Social Services

Injury is one of the most serious public health issues affecting residents of the Northwest Territories. About one quarter of all deaths between 1990 and 1999 were due to injuries. They claim the lives of about the same number of NWT residents as cancer or diseases of the circulatory system. At 99 per 100,000 person-years, the NWT age standardized injury mortality rate during the period between 1990 and 1998 was double the 1996 national crude rate of 45 per 100,000 person-years.<sup>a</sup> Many of the injury deaths in the Territory occur among young adults. The average age at death for injury mortality between 1990 and 1998 was 38 years, compared with 63 years for all other deaths.<sup>1</sup>

Injuries are preventable events, not the result of random chance events over which individuals or communities can exert little or no control. Reducing the number and severity of injuries is therefore a way to improve the health status of a population. This paper describes the public health approach to injury prevention that has developed over the past several decades. Using limited motor vehicle mortality data as an example, this paper presents the Haddon matrix, a conceptual tool that can be used to analyze the reasons for an injury and help in developing injury-prevention strategies.

## Injury Epidemiology

Non-intentional injuries have traditionally been attributed to accidents, acts of God or nature, or defined as a chance occurrence. Individual shortcomings or personal attributes of the accident victim are also often blamed as contributory factors.

In the early 1960s, Dr. William Haddon analyzed the factors underlying non-intentional injuries using the traditional epidemiology model of agent, host and environment. He recognized that injuries are not random events, but are characterized by seasonal variations, long-term trends, geographic and socioeconomic distributions, in the same manner as infectious disease. He concluded that the exchange of energy – mechanical, thermal, radiant, chemical or electrical – with human tissue outside of

human tolerance is the necessary and specific cause of injury. Later, this energy transfer analysis was extended to *negative agents* produced by the absence of necessary elements such as oxygen or heat.<sup>2</sup> Drowning results from a lack of oxygen and frostbite from the lack of heat. The agent of injury – energy – is transmitted to the host through a vehicle (inanimate object) or a vector (animate objects). The environment can be divided into two components. The physical environment includes the characteristics of the setting in which the injury event takes place (for example a road or building). The social environment includes the social norms and practices in the culture.

## The Haddon Matrix

From an epidemiological point of view, the systematic application of how the agent interacts with the host and environment provides information that can be used to reduce the risk of injuries or their severity. To help identify common risk factors, Haddon developed a two dimensional matrix where host, agent and environment make up one dimension.<sup>b</sup> These variables are considered in relation to the second dimension comprising three phases in the timing of the injury event: pre-event, event and post-event. These phases correspond to the three levels of prevention in public health – primary, secondary and tertiary. In this way, the matrix can help in the development of prevention strategies that aim to eliminate or lessen the transfer of energy to the host, thereby preventing or decreasing the severity of the injury.<sup>2</sup>

The pre-event phase refers to the period before the event occurs and includes all factors that influence potential exposure to the event. This is the phase where primary prevention measures can be introduced to prevent the event by eliminating the mechanism of energy transfer or exposure. Types of measures during this phase include campaigns against drinking and driving, teaching children not to play with matches, or legislating a requirement for fences around swimming pools.

a Age adjustment based on indirect method using the 1996 Canadian mortality rates as the standard. The 95% confidence intervals for the NWT rate were 88 per 100,000 to 111 per 100,000, Poisson distribution assumed,  $p < .01$ .

b To avoid confusing the actual agent of injury – energy – and the mechanism by which the energy is transferred, the matrix normally specifies the vehicle or vector.

The event phase refers to the moment of energy transfer and includes factors that affect energy transfer. Here prevention measures focus not so much on preventing an event but on ways to avoid injury or reduce the severity of injury by reducing energy transfer once a potential injury-producing exposure has occurred. Prevention measures such as education and legislation concerning the proper use of bicycle helmets, wearing seat belts, wearing personal flotation devices and installing smoke detectors are examples of interventions at this stage. These secondary prevention strategies may not eliminate all injuries, but they do reduce the severity of injuries. For example, seat belts do not prevent all injuries in vehicle crashes but they nevertheless reduce the numbers of severe and often fatal injuries to the head or chest.

The post-event phase refers to the period after the injury has occurred. At this stage, tertiary prevention measures are used to reduce the consequences of injury. These strategies could include fast access to emergency services and effective rehabilitation services.<sup>2,3</sup>

Collecting accurate data to assess the extent and nature of injuries, the possible risk factors involved, and groups most at risk is the critical first step in designing any injury control initiative. Plainly, the injury issue to be addressed must be identified before the matrix can be used to formulate possible interventions.

Motor vehicle traffic crashes, the leading cause of unintentional injury mortality in the NWT between 1990 and 1998, will be used to illustrate the Haddon matrix. After the injury problem to be addressed is clearly identified, each row and column in the matrix must be clearly defined. In our example of motor vehicle traffic crashes, the host includes both drivers and occupants of the vehicle. The physical environment includes highway conditions. The social environment refers to social norms and public policies. Since most injuries result from a sequence of events representing a continuum of activity rather than a discrete moment in time, defining the rows of the matrix should be done carefully. Depending on a person's perspective, the event can be defined in a number of ways. In this example, the event could be defined as the moment a drunk driver starts his/her vehicle, or the point the driver loses control on a slippery winding road, or when the vehicle crashes into a boulder. Defining the moment of the event helps you to think about what comes before and after the event.<sup>4</sup> *Table 1* illustrates the interaction of factors associated with a motor vehicle traffic crash. The pre-event phase illustrates possible causes for the crash; the event phase illustrates factors that determine whether injury results from the crash; the post-event phase illustrates factors that determine whether the severity of the injury can be reduced.

After both dimensions of the matrix have been

**Table 1: Haddon Matrix: Factors associated with motor vehicle traffic crashes**

	Host (driver, occupants)	Agent/vehicle (motor vehicle)	Physical Environment (highways)	Social Environment (community norms and legislation)
Pre-event (before the crash)	Alcohol intoxication; tendency to drive too fast	Old vehicle with faulty brakes	Roads with dangerous curves and surfacing	Community attitudes towards drinking and driving; enforcement of speed limits
Event (the crash)	Use of seat belt	Hardness and sharpness of contact surfaces in vehicle; Presence of airbag	Guardrail placement	Enforcement of laws related to seat belt use
Post-event (after the crash)	Age and physical condition of victim	Fuel system integrity of vehicle	Distance to and quality of emergency medical services	Government support for trauma care systems

**Table 2: Haddon Matrix applied to the problem of motor vehicle accidents**

	Host (motor vehicle occupants)	Agent/vehicle (motor vehicle)	Physical Environment (highways)	Social Environment (community norms and legislation)
Pre-event (before the crash)	Educate people about the dangers of drinking and driving	Remove unsafe vehicles from the road	Improve conditions of highways	Enforce laws related to impaired driving; change community attitudes about drinking and driving
Event (the crash)	Educate people about the need to wear a seat belt	Ensure airbags operate properly	Install guardrails where appropriate	Enforce seat belt and child safety seat laws
Post-event (after the crash)	Provide first aid instruction to public	Incorporate lessons learned to design car with more safety features	Ensure there are emergency communication and ambulance systems	Ensure government support for effective trauma care systems



defined and factors that cause the injury problem have been detailed, you can use the Haddon matrix to generate ideas about strategies to address the problem. At this point, there may be a tendency to identify the phase of the strategy in terms of when the strategy was put into place. This is incorrect. For example, while a seat belt is secured before the crash occurs, this intervention should not be classified as a pre-event since the benefits of the seat belt take effect at the time of the crash. Similarly, bicycle helmets and smoke detectors should be classified as event phase strategies. *Table 2* provides a number of examples of strategies that can be used for injury control in the case outlined in *Table 1*. Within each cell, a large number of specific issues can be organized, each providing opportunities for influencing the end result. There is no essential priority determining which element must be modified. For example, one potentially effective measure against drunk driving is an ignition interlock device that prevents the car from starting if the driver is drunk.<sup>5</sup> This is a modification of the vehicle rather than the host. Moreover, for injuries involving repeat occurrences, strategies identified in the post-event phase may be effective pre-event strategies for subsequent events. For example, policies and programs aimed at a drunk driver who had a crash (a post-event strategy) serve as a pre-event strategy for future potential incidents. The matrix can be used to generate any number of ideas about strategies that intervene in the pre-event, event, and post-event stages aimed at the host, agent, and environment.<sup>2,3,4</sup>

The Haddon matrix provides a framework that can be used to understand the origins of any injury problem and serve as an aid in identifying a variety of possible interventions. Nevertheless, as Haddon maintained, the analysis does not provide a formula or guide for action in specific cases. Some interventions will be more practical and hold more promise of success than others.<sup>2</sup> The question becomes how to decide which interventions have the best chance of success in any given situation. One option is the development of a list of value criteria to help guide decision making. Such a list could include: the effectiveness of a strategy determined by evaluations in similar settings, the cost of the

proposed intervention, and the political feasibility of implementation.<sup>4</sup>

## Conclusion

The introduction and widespread use of the Haddon matrix shifted injury prevention away from an earlier focus on changing individual behaviour through health education that, in effect, blamed the victim. Today, injury-prevention programs include more public-based interventions that modify the agent or environment in which injuries occur. In general, injury-prevention strategies can be divided into two very broad groups based on the required level of individual actions. Passive interventions need no input or action by the individual and are usually accomplished by modifying the vehicle, vector or environment. The introduction of anti-lock brakes and air bags in cars, installing smoke detectors in homes, adjusting the water temperature in home hot water tanks, installing handrails and bath-bars in the homes of elderly residents are examples. Active intervention requires individuals to take action for the intervention to work, for example wearing seat belts and bicycle helmets.

Passive measures are often considered more effective, particularly when compared to active interventions that require frequent or time-consuming action. It is sometimes easier to modify the environment or vehicle than it is to convince people to change their behaviour. The most effective prevention strategies combine both approaches. Human actions and personal responsibility still remain important in injury causation and modifying behaviour is an important component in many injury-prevention strategies.

Reviews of injury-prevention measures since the 1960s have lead to the conclusion that no single intervention strategy is likely to be sufficient to address a problem. Rather, multifaceted approaches are needed. This is because there are so many types of injuries taking place in such a wide variety of settings. The current public health approach to injury control maintains the need for combinations of complementary interventions including health education, environmental modifications, legislative regulations and enforcement, and engineering techniques.

**“The introduction and widespread use of the Haddon matrix shifted injury prevention away from an earlier focus on changing individual behaviour through health education that, in effect, blamed the victim.”**

*continued on page 11*

Elizabeth Cook,  
RN(EC) BScN  
Nurse Practitioner Faculty  
Health Programs  
Aurora College

Karen Graham,  
RN SCM OPN PHN BN  
Nurse Practitioner Faculty  
Health Programs  
Aurora College

## Nurse Practitioner Education – Validating the Nurse Practitioner Role in the North

Registered nurses have worked successfully in health centres (previously called nursing stations) in Canada's North for many years, often with limited formal education for this expanded role. They learned their skills by working in the challenging role demanded of nurses in isolated communities. This work could also be described as that of a nurse practitioner (NP). This article defines the term nurse practitioner and describes the development of nurse practitioner education in the NWT. It will also include a brief overview of the nurse practitioner program offered by Aurora College.

The Canadian Nurses Association (CNA) has defined a nurse practitioner as,

*...a registered nurse whose practice is focused on providing services to manage the health needs of individuals, families, groups, and communities. The nurse practitioner role is grounded in the nursing profession's values, knowledge, theories, and practice and is a role that complements, rather than replaces, other health care providers.*

*Nurse practitioners have the potential to contribute significantly to new models of health care based on the principles of primary health care.*

*Nurse practitioners integrate into their practice, elements such as diagnosing and treating health problems and prescribing drugs. Nurse practitioners work autonomously, from initiating the care process and monitoring health outcomes to collaborating with other health care professionals. Nurse practitioners practice in a variety of community, acute care and long-term care settings. These include, but are not limited to, community health centres, nursing outposts, special units and clinics, emergency departments and long-term care facilities.<sup>1</sup>*

Across Canada, the NP role has gained much attention. There are a number of NP programs in the country and more are being planned as we write. In the present litigious climate, it is very important for employers to be able to demonstrate that their staff are qualified for the work required of them. Requiring that staff have a particular level of education and licensure is one way to do this. Although it is

possible to learn a great deal on the job in the apprenticeship fashion, it is difficult to be assured of consistency in the quality and content of what is learned. The issue at stake is quality patient care. An education program and a requirement for professional licensure can address this concern. Patterson states, "As a self-regulating profession, nursing must ensure that its practitioners offer safe, quality care and that new roles not only promote excellence in client-centred care but develop within the public interest."<sup>2</sup>

The new nursing profession act (under development) for the NWT will define the NP scope of practice and protect the NP title. The first step in this process was the development of the Entry Level Competencies for the Primary Health Care Nurse Practitioner (PHCNP).<sup>3</sup> Aurora College uses these competencies to guide the PHCNP program content.

As part of an evaluation of the Advanced Nursing Skills Education Program (ANSEP), a recommendation was made to establish a fully accredited NP program.<sup>4</sup> This required profiling the education and experience of nurses working in the health centres across the NWT. NP programs across Canada were then examined. The intent was to collaborate or broker a program suitable to the NWT. A close match was identified between the profile of Newfoundland and NWT nurses. Thus, the Newfoundland program was determined to be a good fit for the education needs of nurses working in NWT health centres. In addition, it was important to us that the principles of primary health care be central to the philosophy of our nurse practitioner education. This was well demonstrated in the Newfoundland program. In April 2001, negotiations were completed to broker the Newfoundland NP program for delivery by Aurora College in the NWT.

Semester	Courses
Semester One	<ul style="list-style-type: none"> <li>Advanced Health Assessment + clinical</li> <li>Community Health Promotion + clinical</li> <li>NP Roles and Issues</li> </ul>
Semester Two	<ul style="list-style-type: none"> <li>Pathophysiology</li> <li>Advanced Pharmacology</li> <li>Family Health Promotion + clinical</li> </ul>
Semester Three	<ul style="list-style-type: none"> <li>Advanced Clinical Decision Making I + clinical</li> </ul>
Semester Four	<ul style="list-style-type: none"> <li>Advanced Clinical Decision Making II (Preceptorship)</li> </ul>

In the fall of 2001, the first PHCNP program began. The program consists of four academic semesters.

It is our vision that health centres be staffed by qualified NPs who have either taken a formal NP program or who have received a formal NP designation through prior learning assessment and recognition (PLAR). These are lofty aspirations. The PHCNP program, offered by Aurora College,

is an important step in this journey.

## REFERENCES

- 1 Canadian Nurses Association. *Position Statement: The Nurse Practitioner*. Ottawa: CNA, March 2002.
- 2 Patterson, Chris, ed. *Nurse Practitioners...The Catalyst of Change*. Troy, ON: Newgrange Press, 2000.
- 3 Northwest Territories Registered Nurses Association. *Entry Level Competencies for the Primary Health Care Nurse Practitioner*. Yellowknife, NT: CanArctic Press, 2000.
- 4 The ANSEP Advisory Committee. *The ANSEP Review*. January 15, 1999.

*The Public Health Approach to Injury...continued from page 9*

This approach is often referred to as the *four Es of injury prevention*.<sup>3,6</sup>

The challenge of reducing injuries in the Northwest Territories will require the development of comprehensive injury-prevention programs that combine health education, environmental modifications, legislation, and engineering techniques. This will demand multisectoral and co-ordinated efforts to target underlying problems at the community and societal levels. More than most public health issues, injury prevention works best when various government departments, community groups and private organizations are involved. In effect, injury prevention is most effective within a population health framework where multiple causes of a health problem are addressed by multiple sectors in government and society. Any injury event can be seen as

the culmination of a chain of causation. Interventions that break any of the links in this chain will be effective.

## REFERENCES

- 1 Government of the Northwest Territories, Department of Health and Social Services. *Injury Mortality Facts: The Northwest Territories 1990-1998*. Unpublished Data.
- 2 Haddon, W. 1980. *Advances in the Epidemiology of Injuries as a Basis for Public Policy*. *Public Health Reports* 95(5): 411-421.
- 3 Kraus J.F., C. Peek-Asa and D. Vimalachandra. *Injury Control: The Public Health Approach*. In R.B Wallace ed, Maxcy-Rosenau-Last: *Public Health & Preventive Medicine*. Stamford: Appleton & Lange, 1998.
- 4 Runyan C.W. 1998. *Using the Haddon Matrix; Introducing the Third Dimension*. *Injury Prevention* 4:302-307.
- 5 Coben J.H. and G.L. Larkin. 1999. *Effectiveness of Ignition Interlock Devices in Reducing Drunk Driving Recidivism*. *American Journal of Preventive Medicine* 16(1 Suppl):81-98.
- 6 The National Committee for Injury Prevention and Control. 1989. *Injury Prevention: Meeting the Challenge*. *American Journal of Preventive Medicine* 5(3).

*Summary of Report...continued from page 3*

environmental tobacco smoke, and almost 45% of the population between the ages of 12 and 19 reported exposure to environmental tobacco smoke. In 2000-01, 34.5% of 12-19 year olds reported being current smokers, with 19.3% smoking on a daily basis.

A 2000-01 survey found that a significant proportion of the NWT population was obese: 17.3% age 20-34, 20.9% age 35 to 44, and 31.2% age 45 to 64. This compared to the following national proportions of obese people: 11.3% age 20 to 34, 14.7% age 35 to 44, and 18.2% age 45 to 64.

These observations, and the many others made in the report, offer a perspective on the health of the people of the NWT and on the state of their health services. Overall, the report provides

a strong case for the need to maintain health promotion and disease prevention initiatives. While there are many positive findings, there are also many challenges to overcome. The Department intends to prepare a similar report every two years. This will ensure that the people of the NWT are kept informed of the health status of the population and of the outcomes and effectiveness of the health care system.

## REFERENCES

- 1 This summary is an extract of the report's executive summary and should not be considered a substitution for the actual report. The report in its entirety can be found on the DHSS website at <http://www.hlthss.gov.nt.ca>.
- 2 Data referenced in this article come from Statistics Canada, NWT Department of Health and Social Services and NWT Bureau of Statistics. More precise references are included in NWT Department of Health and Social Services, *Report to Residents of the Northwest Territories on Comparable Health and Health System Indicators* (2002).

Sheila Sears, RN, MPH  
 Manager,  
 Primary Community  
 Services  
 Department of Health &  
 Social Services

## A Health & Social Services Call Centre in the NWT

The Northwest Territories Health and Social Services System Action Plan 2002 - 2005 committed the Department of Health and Social Services to implementing a 1-800 health and social services call centre in the NWT.

Telephone health support services have been shown to be an efficient and effective way of supplying health information to consumers, often without requiring a visit to a health care provider. The use of communications technology to deliver professional health care services or telehealth is growing at a tremendous rate. This service is becoming increasingly popular in many jurisdictions in North America and elsewhere. Many types of health information and advice can be provided over the telephone, including information focused on specific topics such as AIDS and poison control, as well as general health information, information on where to access services and education. The benefits of a toll-free health and social services call centre include:

- improved public access to the most appropriate health and social service,
- improved public access to information to facilitate decision making, and
- improved public satisfaction with health and social services.

It is reasonable to expect that telephone triage services will lead to more appropriate use of and access to health and social services in the NWT.

### Background

The Northwest Territories Registered Nurses Association (NWTRNA) received funding from Health Canada's Population Health Fund (The Rural and Remote Health Innovation Initiative) to explore options for a northern health and social services call centre. A steering committee made up of stakeholders from the three northern territories guided the process. They recommended that each government go to an open request for proposals for the provision of a community triage, health advice and information line for NWT residents through a

toll-free telephone service.

Health and social service providers across the three territories were surveyed about who they thought would use a call centre in the communities. The results suggested that it would be:

- frequent callers to Health Centre/Social Services Offices (e.g. young mothers, relatives of elders);
- clients/patients who wish to remain anonymous (e.g. victims of domestic abuse);
- those clients who are most comfortable with technology (e.g. younger age groups); and
- everyone (as long as the proper education and promotion of the service is given to community members).

Respondents said the main reasons people would use a call centre would be for:

- general health advice, information, and emotional support,
- non-emergency self-care information,
- advice in an emergency situation,
- after-hours services, and
- a second opinion.

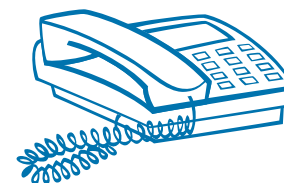
Survey respondents were also asked to identify issues they thought would prevent people from using a call centre or that would hinder use of such a service. The main issues noted were:

- language barriers,
- fear of change/the unknown,
- loss of the human element of service,
- loss of immediacy of response,
- perceived lack of confidentiality/trust concerns,
- lack of access to a phone/long distance service, and
- cultural differences in the North.

From the review of the literature and discussions with service providers a number of recommendations were identified. Some of the

more important recommendations to be considered when seeking a service provider for a call centre service included:

1. The service should not overlap or duplicate other services but should augment existing services, especially with provision of primary health care services.
2. The first point of contact with the service should be a registered nurse trained in telephone triage and preferably with emergency room or expanded role community experience. Telephone practice nurses should possess highly developed communication and interpersonal skills.
3. When conducting telephone triage, nurses should follow the steps in the decision support software, but should have the latitude to exercise clinical judgment.
4. The triage service should refer the caller to the most appropriate service available to the caller, depending on the community from which they are calling.
5. Documentation of calls should be done electronically, with provision for manual documentation in the event of system malfunction. It may be useful to have the caller's number displayed in the event of crisis.
6. All calls should be treated as confidential. Callers should have the option of remaining anonymous and should be advised if there might be a third party monitoring of calls for quality assurance or evaluation purposes. Consent for disclosure should be obtained prior to feedback to the primary care provider or for other purposes.
7. All records containing personal information should be kept secure.
8. Information should only be shared with those individuals or entities external to the organization who contractually or statutorily have authority to receive such information or who are otherwise specifically authorized. Information will be shared only with clinical staff and non-clinical staff within the organization who need access to implement the activities listed above.
9. Ongoing, transparent, internal and external, third party quantitative and qualitative evaluation should be built into the service. A continuous quality improvement program should be implemented.
10. There should be a mechanism and process to continuously monitor, measure and review, at least monthly, all incoming triage and health information calls, including at least: length of time for first call resolution, average speed of answer and average abandonment rate.
11. The decision support software used to conduct telephone triage should be compatible with Canadian and Territorial medical practice protocols and guidelines and clinically applicable for use in the Territory.



## Conclusion

Throughout the North, there has been a dependence on the health and social services system. This has been to the detriment of people's self-care capacity and of the care providers who are in demand, day and night, for a variety of health and social services concerns, few of which are true emergencies. The demand for access to service and information 24 hours a day creates a significant challenge for the health and social services system.

Technology is no longer a supporting player, but a driving force behind new products, services and ways of providing care. Telehealth represents the state of the art and leading edge in developments in the use of information and communications technologies in the promotion of health and the delivery of health and social services. Clinicians and consumers can all be connected to providers using the infrastructure available.

*My thanks to the NWTRNA for their work on developing the options for the northern call centre.*

Alana Kronstal,  
Summer Student,  
Health Promotion  
Department of Health &  
Social Services

**“The Internet’s ability to help and update health professionals is countered by its potential to misinform.”**

## Evaluating Health Information on the Internet: How Reliable Are Your Sources?

It is apparent from the number of sites and their traffic that a large proportion of the population uses the Internet to get health information, advice and support on matters affecting their health and to network with others.<sup>1</sup>

One recent online survey of over 3,200 health information seekers found that 64% of respondents were healthcare professionals.<sup>2</sup> Such findings confirm that the Internet is becoming a relied-upon source of information for health professionals. NWT health professionals are particularly likely to use the Internet to access health information due to the isolation of many communities.

The Internet’s ability to help and update health professionals is countered by its potential to misinform. Because there are neither standards nor rating systems for information that goes on the Web, anything can and will be published there. In the "Health on the Net Foundation" survey, 59% of the health professionals who responded felt that time-wasting information was the greatest shortcoming of the Internet.<sup>2</sup> Health professionals need to have good assessment skills in order to determine the value of the information on a website. The following criteria can be used to evaluate health information on the Internet.<sup>3</sup>

**Credibility** - *To determine how credible a website is, consider the source, relevance, how current the information is, and whether the site has undergone a review process.*

- **Source:** The source of health information is one of the most important measures to determine its quality and credibility. Look on the site for the name/logo of the institution or organization responsible for the information. If the information on the site was written by an individual, check to make sure the website states the author’s name and qualifications/credentials. Do not assume that the title of Doctor (Dr.) or "Specialist" qualifies someone to impart health advice. Any personal or financial

associations that present a real or perceived bias should be openly stated. For example, if an organization receives funding from corporate sponsors, these sponsors should be listed on their website. If the site is advertising a product or service, it should be openly stated. Be wary of websites that try too hard to sell a product.

- **Relevance:** Carefully review the content of the site to ensure that it corresponds with the information it claims to offer. For example, if a website claims to be an overview of various methods to smoking cessation, but focuses entirely on promoting a single product or approach, it is probably not a worthwhile site.
- **How current the information is:** It is important to look at the date on which the original information is based. You can gauge how recent the information is by looking at the dates of the references used as well as the date when the information was posted on the web. This date should be displayed clearly on the website. The date of any website updates should also be displayed.
- **Review process:** A good sign of a trustworthy website is a seal of approval from an individual or group commonly perceived as credible, such as Health Canada or a large national foundation like the Health and Stroke Foundation or the Canadian Diabetes Association. Additionally, websites should state whether the information provided has been peer reviewed and, if so, the individuals and process involved.

**Content** – *A legitimate website should be accurate and complete and any appropriate disclaimers should be provided.*

- **Accuracy:** An accurate website will reference or cite the data from which conclusions are drawn, including any clinical or scientific evidence. If there are studies mentioned on the website, the design of the study should be described in

language appropriate for the target population. Be cautious of sites that are skimpy on research details. References should have been recently published and varied (i.e. not all by the same author or organization). Be aware that testimonials are not evidence.

- **Completeness:** While it is nearly impossible for a website to contain all there is to know on a given health subject, a complete website will provide information of key importance to understanding an issue, and will refer to other sites on the same issue for further investigation. As well, websites should provide a balanced perspective on an issue. Avoid websites that clearly present a one-sided view. Negative results or statements of information not known should be included on the site. For example, a website for pharmaceutical drugs or dietary supplements should include potential side effects of the product.
- **Disclaimers:** An appropriate disclaimer on a health-related website should emphasize that the content is for information purposes, not medical advice, and advise readers to consult a health professional before making any health decisions. Additionally, any limitations with regard to purpose, scope, authority and how current the information is should be clearly stated.

**Disclosure** – *If a website is collecting data on its users, it is very important that browsers are informed about this as well as how the information will be used.*

- The purpose of the website should be clearly stated on the homepage. If there is any collection, use or distribution of information associated with using the site (i.e. if your e-mail address is passed on to corporate sponsors), the site should openly inform visitors of this and give them the option of refusing to have their personal information forwarded to others or guarantee privacy.

**Links** – *The external links that refer visitors to other authoritative sources are an important indicator of the quality of a website.*

- Links are an important component of a website and should be included so that visitors can easily access other appropriate sites and read further on a topic. The originating site loses credibility if it links to sites that do not meet the above criteria.

**Accountability** – *A good website is accountable to its users.*

- Look for websites that provide a method of feedback (i.e. contact information for the authors or a guest book for messages). This allows users the opportunity to offer comments, corrections and raise questions.

**Design** – *Although the design of a website doesn't reflect the quality of the content, it does make a difference in terms of its usefulness and accessibility.*

- The best health sites are logically organized, with the focus of the website and the target audience taken into consideration. For example, the language used on a website should be in line with its intended reader. Added perks such as search capabilities are ideal for easy site navigation.
- Be wary of websites with a lot of pop-up windows.

By paying careful consideration to issues of credibility, content, disclosure, links, accountability and design, it is possible to weed out questionable health information websites. An easy-to-use checklist outlining these points is available at the following web address to help health professionals in evaluating websites:

<http://www.library.dal.ca/how/check2.htm>.

## REFERENCES

- 1 Health Canada (1997). *Health Promotion and New Information Technologies*.  
<http://www.hc-sc.gc.ca/hppb/healthpromotiondevelopment/pube/infotech/infotech1.htm#toc>
- 2 Health on the Net Foundation (February/March, 2001). *Evolution of Internet Use for Health Purposes*.  
<http://www.hon.ch/Survey/FebMar2001/survey.html>
- 3 Dalhousie University (2002). *Criteria for Evaluating Websites*.  
<http://www.library.dal.ca/how/criteval.htm>

**"Childhood obesity is an epidemic. The disease process leading to osteoporosis, hypertension, and cardiovascular disease begins in childhood if physical activity levels are insufficient. We can help prevent these diseases through an active lifestyle."**

*School Children...continued from page 1*

## National Trends Related to School Children and Unhealthy Lifestyles

What follows are national trends and statistics from several sources that are raising concerns.

### Physical Inactivity and Activity

- Only a third of Canadians aged 5 to 17 are active enough for optimal growth and development, that is, for the development of musculature and bone density, according to the Canadian Fitness and Lifestyle Research Institute.<sup>7</sup>
- The average Canadian child spends 15 to 26 hours per week or more watching TV, playing video games or sitting in front of a computer. This is time earlier generations spent outside doing outdoor or subsistence activities.<sup>1</sup>
- Canadian children are significantly less active compared to children in the past. In the early 90s, it was estimated that 60% of Canadian children did not meet the fitness standards for their age and that children used up to 400% less energy than children did 40 years ago.<sup>3</sup>
- To be physically active nowadays, children need to take part in either organized or leisure activities. In other words, they now have to choose to be active.<sup>3</sup>
- Only one in five Canadian children walks to school. Physical Education may be curtailed when Canadian schools need to cut costs. A 1998 study found only 10% of schools offered gym daily and 10% of school-aged children had no gym time at all.<sup>1</sup>

### Overweight and Obesity

- Canadian children are becoming progressively overweight. From 1981 to 1996, the prevalence of overweight increased 92% among boys and 57% among girls. During the same period, obesity in boys and girls more than doubled.<sup>5</sup>
- Canada has the third highest level of childhood obesity in the world.<sup>8</sup>
- Most overweight children live in areas with the lowest incomes including the Atlantic and Prairie Provinces, rural Canada and in Aboriginal communities.<sup>1</sup>

- Children are now eating high fat, high energy food, especially fast and junk food, as a regular part of their diet.<sup>3</sup>

### Health and Social Implications of These Trends

According to Dr. Claire LeBlanc, Chair of the Canadian Pediatric Society's Committee on Healthy Active Children and Youth and a sports medicine specialist, "Childhood obesity is an epidemic. The disease process leading to osteoporosis, hypertension, and cardiovascular disease begins in childhood if physical activity levels are insufficient. We can help prevent these diseases through an active lifestyle."<sup>1,5</sup>

Health and disease processes associated with poor nutrition, obesity and inactivity, are well known. There are increasing trends in chronic disease rates among children as follows:

- Type 2 diabetes, usually only seen in adults, is increasing among children and has been diagnosed in children as young as 10.<sup>8</sup>
- Overweight, inactive children frequently become overweight, inactive adults, increasing the risks of health concerns associated with obesity.<sup>4</sup>
- In 1999, the estimated direct Canadian health care costs related to inactive lifestyles were \$2.1 billion. The costs in 1997 related to obesity were \$1.8 billion. With higher levels of obesity, costs will overtax our already overburdened health system.<sup>3,9</sup>

### The Causes are Complex

Studies and observations point to many causes of these trends though underlying issues are complex and diverse. It is a combination of individual, family, and societal issues that are causing the increase in overweight, inactive children.<sup>4</sup> Causes are directly related to changes in our society and how our children's lives are affected by these changes.

- **Family life.** Family life has changed dramatically with more single parent families and families with both parents who work. This has had the effect of limited time for families to have healthy lifestyle behaviours (cooking well-balanced meals and regular family-based activity).<sup>4</sup>



- **Sedentary Children.** Children now watch more television, surf the Internet, and play more video games. Because of this, they have less time for physical activity.<sup>5</sup>
- **School Physical Education Programs.** The time the average Canadian child spends in physical education activities has decreased.<sup>4</sup>
- St. James Catholic School, Guelph, Ontario has placed the emphasis on fun rather than competition. The physical activity director has convinced 70% of the school's 1,300 students to sign up for physical education in 2001.<sup>1</sup>
- Evangeline Middle School, New Minas, Nova Scotia (population 5,000) has gym class every day, intramural sports are mandatory and they take place during regular class hours, not at lunch or after school. The school gym is open every night, every weekend, and throughout the summer.<sup>1</sup>

### Promoting Healthy Habits – Where do we start?

Overweight, obesity and inactivity in children need to be addressed and there are areas where we can make a difference through the promotion of healthy lifestyles. Chronic diseases can be prevented, particularly through active living and nutrition education. What follows is a description of activities on various levels that are promoting healthy lifestyles among Canadian children.

#### National Activities

- The most recent Ministers of Health meeting news release stated that the Ministers agreed to work on healthy living strategies that emphasize nutrition, physical activity and healthy body weights.<sup>10</sup>
- In April, Health Canada rolled out the Physical Activity Guide for Children and Youth.<sup>11</sup> The Guide urges inactive kids to exercise an extra half hour per day and cut idle time by 30 minutes each day.
- The Interprovincial Sport and Recreation Council is involved with Active School Communities in follow-up to a National Recreation Roundtable on active school communities. This meeting took place October 19-20, 2001.<sup>12</sup>

#### Provincial Activities

There are some very promising and interesting activities in other jurisdictions that may be applicable to the North.

- In Surrey B.C., the municipal administration has endorsed the importance of keeping children active. Surrey spent \$15 million on a new indoor pool, and \$12 million on a recreation centre. It will open a new artificial field so youth can play soccer, field hockey and rugby throughout the year.<sup>1</sup>
- First Nations boxing clubs in Winnipeg put on demonstrations to underline the importance of being in shape.<sup>1</sup>

#### NWT Active Living and Nutrition Initiatives

Several organizations, schools, groups or agencies have taken the initiative to begin to address overweight and inactivity in the NWT. Here are a few examples of their work to date:

- *Recreation Week*, September 15th – 22nd 2002, celebrated the achievement of recreation leaders and the benefits that recreation brings to Northerners. Each day, tips on active living were distributed by MACA via email to educators, recreation co-ordinators, and others.<sup>12</sup>
- *Education Week*, February 24th – March 2nd, 2003. This year's theme is *Choose to Move ... Move for Health*. The National Physical Activity Guide will be part of the resource materials mailed to communities to support Education Week activities.<sup>12</sup>
- As of 2001, a new Physical Education (PE) curriculum is in place for elementary schools. Eighteen educators were trained in this curriculum. It is based on an outcomes approach and emphasizes *active living* as foundational to PE programming.<sup>13</sup>
- The *Wha Ti Rainbow Club* was funded through the Health Promotion Strategy and initiated by the Wha Ti Health Centre. The message of healthy eating and active living is encouraged through interactive learning and eye-catching visual displays. Parents, children, community members and health centre staff are involved.<sup>14</sup>

- Mildred Hall Elementary School in Yellowknife did a pilot program for grades 6 to 8. During school hours, in addition to their regular physical education program, they use the *Active8* physical activity curriculum developed by the Foundation for Active, Healthy Kids, Ontario.<sup>15</sup>
- William McDonald School, Yellowknife, has developed healthy food policies through their Parent Advisory Committee.<sup>15</sup>

### Next Steps

Specific territorial interventions are needed to improve physical activity and nutrition among children at all grade levels. Territorial policies and initiatives, mandatory school-based physical fitness and nutrition education, and parental education are all achievable through a comprehensive health promotion and active living strategy. This will, over time, decrease the trend towards overweight, inactive children. It is an issue that we can no longer afford *not* to address.

Recognizing this need, the Departments of Municipal and Community Affairs, Education, Culture and Employment and Health and Social Services, as well as partner organizations, will develop an active living strategy to address these needs. It is only through joint action and commitment that this issue can be addressed. The first step will be to host a meeting of representatives with education, health and

recreation backgrounds to begin the development of a framework for action. This is planned for November/December 2002.

A coming issue of *EpiNorth* will provide another update of active living activities as they relate to children, nutrition and school performance.

### REFERENCES:

1. DeMont, John, *Growing Up Large*, MacLeans, August 15, 2002, p 20 – 26.
2. Cornwall, Claudia, *Fat Kids, Failing Health*, Reader's Digest, September 2002, p 50 – 56.
3. Brett, Kelly. *Active Kids, Healthy Kids*, Family Health. Summer 2002, p 34 – 35.
4. McCoy, Lesley. 2002. *Childhood Obesity, Our Newest Health Care Crisis*, Diabetes Care News, 10 (Summer). WWW.DIABETESCAREGUIDE.COM
5. Health Canada. *Doctors Urged to Promote Healthy Active Living for Children and Youth*, Aboriginal Head Start Newsletter, Spring/Summer, 2002.
6. *Canadian Community Health Survey: Share File, 2000-01*, provided by the Department of Health & Social Services.
7. Schauerte, Gary. 2002. *The Active Road to Health*. EpiNorth 14,2:10 – 11.
8. Canadian Press. *Cree Children at Risk of Diabetes*. June 5, 1999.
9. MacDonald, Dave. 2002. *Another Case for Prevention*. EpiNorth 14,3: 6 – 7.
10. News Release: *Canada's Health Ministers Progress on Health Care Renewal and Healthy Living*, September 5, 2002. [http://www.scics.gc.ca/cinfo02/830756004\\_e.html](http://www.scics.gc.ca/cinfo02/830756004_e.html)
11. Health Canada. *Physical Activity Guide for Children and Youth*. Launched April 5th 2002. <http://www.hc-sc.gc.ca/hppb/paguide/youth.html>
12. Szabo, Chris and Christopher Bennington. Municipal and Community Affairs. Personal communication. September 2002.
13. Stewart, Elaine. Education, Culture and Employment. Personal communication. September 2002.
14. Fitzpatrick, Trish. Yellowknife Health and Social Services Authority. Personal communication. September 2002.
15. Wong, Mabel. Stanton Territorial Hospital. Personal communication. September 2002.

## CONFERENCES & workshops

Vicki Lafferty,  
President  
NWT/Nunavut Branch  
CPHA

### Canadian Public Health Association 93rd Annual Conference

July 7th – 10th 2002  
Yellowknife, NT

The Canadian Public Health Association (CPHA) is a national, independent, not-for-profit, voluntary association representing public health in Canada, with links to the international public health community.

The CPHA NWT/Nunavut Branch co-hosted the 93rd annual conference titled *Our Environment, Our Health* in Yellowknife from July 7th to 10th 2002. Over 235 delegates registered for the conference. A number of special speakers and spouses attended portions of the conference as well.

The theme of the conference, *Our Environment, Our Health*, was designed to address the challenges of the environment and its relationship to our health.

The following four plenary sessions were offered:

- Dr. Nick Drager, Co-ordinator, Globalization, Cross-Sectoral Policies and Human Rights, WHO;
- Dr. Graham Chance, Chairperson, Advisory Council, Canadian Institute of Child Health;
- Dr. Jeffrey Wigand, Smoke-Free Kids, Inc.; and
- Dr. Ilona Kickbush, Professor and Head, Division of Global Health, Yale University.

An evening session with Dr. Jeffrey Wigand was open to the public; approximately 80 people attended.

There was also a *town hall session* with Dr. David Butler-Jones as the moderator and Dr. Trevor Hancock, Ms. Joanne Barnaby and Ms. Simone Marler as panelists. The panel focused on the health and social impacts of resource development and the session provided delegates with an opportunity to learn from the perspectives of public health, the Aboriginal community and the oil and gas sector about steps individuals, communities, governments, and businesses can take to influence sustainable development on local, national and global levels.

There were a number of pre-conference workshops and concurrent sessions and workshops on the sub-themes of Healthy Beginnings, Globalization, Linking Environment and Health, and Evolution of Health Governance. Of note was a session on International Health, with guest speakers from Cuba, Mozambique, and the Canadian International Development Agency (CIDA) Health Promotion Project in Brazil. The Honourable Ethel Blondin-Andrew, Secretary of State, Children and Youth, chaired the workshop on International Health and provided opening remarks in support of families, children and youth.

These sessions provided delegates with an opportunity to share the evidence of best practices by looking at the challenges and successes in research, community action and policy development.

The overall quality and relevance of the keynote addresses, oral presentations, workshops and poster presentations received ratings from good to excellent on evaluation forms completed by delegates. Concerns were expressed about the location and space available for the posters and exhibits and the quality of service provided by the local hospitality industry.

The conference provided an opportunity for networking and the formal and informal exchange of work experience, information on emerging trends and new ideas. It was also an opportunity to showcase our northern culture, environment and lifestyle. Many delegates reported that the conference had a less formal atmosphere and environment than other years that was refreshing and energizing.

Plans are underway and a Call for Abstracts has gone out for the 94th Annual Conference of the CPHA. It will be co-hosted with the Alberta Public Health Association and will be held in Calgary, May 10th to 13th, 2003. The deadline for submitting abstracts is November 1st 2002. Northerners interested in submitting abstracts can obtain an Abstract Submission Form and information about the conference from the CPHA's website @ [www.cpha.ca/english/conf/94thAnl/94conf.htm](http://www.cpha.ca/english/conf/94thAnl/94conf.htm) or by contacting the Conference Department at the CPHA by email at [conferences@cpha.ca](mailto:conferences@cpha.ca) or by phone at 613-725-3769.

If you are interested in joining the CPHA contact Vicki Lafferty, President, NWT/Nunavut Branch of CPHA at [cphantnu@ssimicro.com](mailto:cphantnu@ssimicro.com) or by phone at 867-873-7709.

**“The CPHA’s mission is to be a national resource in Canada that advocates for the improvement and enhancement of personal and community health, according to the public health principles of disease prevention, health promotion and public health policy.”**

# NOTIFIABLE diseases

for the Northwest Territories (NWT) July 2002 - September 2002<sup>a</sup>

		July - September 2002	Cumulative Totals - 2002
		NWT	NWT
<i>Vaccine Preventable Diseases</i>	Hepatitis B	1	2
	Haemophilus Influenzae	1	1
	Influenzae A	0	12
	Influenzae B	0	0
	Pertussis	1	13
<i>Sexually Transmitted/ Bloodborne Diseases</i>	Chlamydia	166	429
	Gonorrhoea	44	96
	Hepatitis C	3	24
	Hepatitis, Other	1	1
	Syphilis	0	0
<i>Diseases by Direct Contact/ Respiratory Route</i>	Chicken Pox	14	67
	Invasive Group A Strep	4	4
	Invasive Strep Pneumoniae	3	7
	Legionellosis	0	0
	Listeriosis	1	1
	Meningitis, Pneumococcal	0	0
	Meningitis, Other Bacterial	0	0
	Meningitis, Unspecified	0	1
	Meningitis, Viral	0	0
	Meningococcal Infections	0	0
	Respiratory Syncytial Virus	1	38
	Tuberculosis	2	4
<i>Enteric, Food and Waterborne Diseases</i>	Botulism	0	0
	Campylobacteriosis	3	7
	Cryptosporidiosis	0	0
	E.Coli 0157:H7	1	2
	Giardiasis	4	9
	Hepatitis A	0	0
	Salmonellosis	2	7
	Shigellosis	2	3
	Tapeworm Infestation	0	1
	Trichinosis	0	0
<i>Vectorborne/Other Zoonotic Diseases</i>	Yersinia	2	2
	Brucellosis	0	0
	Malaria	0	0
<i>Antibiotic resistant microorganisms</i>	Rabies Exposure	8	11
	Methicillin-resistant Staph.Aureus	2	3
	Vancomycin-resistant Enterococci	0	0

## NWT HIV Infections Reported from 1987 to 2002

Total	Age Group at Diagnosis								Gender		Risk Category					
	0-9	10-14	15-19	20-29	30-39	40-49	50-59	60+	Female	Male	MSM <sup>b</sup>	MSM/ IDU <sup>c</sup>	IDU	Hetero-sexual	Perinatal	Blood Products
21	1	0	0	4	11	4	0	1	2	19	11	1	4	3	1	1

a Statistics are based on currently available data and previous data may be subject to change.  
 b Men who have sex with men  
 c Injection Drug User