



NORTH

The Northwest Territories Epidemiology Newsletter

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Psychiatric Illness – The Invisible Disability

Suzanne Perkins, MDCM, FRCPC (Psych), Psychiatrist, Stanton Territorial Health Authority

Most people think of chronic illness in physical terms – individuals sidelined by accidents, diabetes or heart disease – people in wheelchairs and with canes. In fact, chronic mental illness accounts for a very large proportion of people with lifelong disability. The World Health Organization listed unipolar major depression as the fifth leading cause of disability in 1999 and projects that by 2020 that rank order will shift to second after ischemic heart disease.¹

There are substantial numbers of people worldwide who have a diagnosis consistent with chronic or recurrent mental illness. This would include schizophrenia, schizoaffective disorder, bipolar affective disorder (manic-depression), or major depressive disorder (MDD). Many other diagnoses, such as anxiety and personality disorders, may not fully disable a person from engaging in work and relationships but they often prevent individuals from reaching their full potential.

The Scope Of The Problem

Worldwide, approximately 1% of people are diagnosed with schizophrenia and another 1 to 2% have the diagnosis of bipolar disorder. On the assumption that these figures apply to the Northwest Territories, with a population of approximately 45,000, this translates into more than 1,000 people living with such lifelong severe disorders. Depression affects approximately 10% of men and at least 20% of women in their lifetime.² In the NWT, this means that 6,000 to 7,000 people may suffer from a depressive disorder at least once in their lifetime. U.S. data indicate that as many as 10% of the population may suffer from depressive symptoms each year. Many of these people receive either no or inadequate treatment.³ A recent study conducted in Europe found that the prevalence of major depressive disorder is nearly 2.5% of the population.⁴ In the NWT, this would translate into more than 1,000 people at any given time.

In addition to the effects on the mood and mind of the sufferer, patients with MDD have a doubling of mortality due to medical causes (i.e. independent of suicide). Depression has clear-cut negative effects on concurrent medical diagnoses such as coronary artery disease, diabetes, and osteoporosis. The recognition and treatment of depression in these patients enhances their medical outcome.⁵

In Canada, the direct cost of schizophrenia alone is about \$2.35 billion per year, with indirect costs of about \$2 billion.⁶ This is despite the trend in recent decades to discharge such people from large institutions and attempts to care for them as outpatients. In addition to hospitalization, a significant number of people with schizophrenia are housed in psychiatric boarding homes, which provide structure, medication support, and rehabilitative activities. These numbers do not take into account the heartaches for families and friends at having such young persons *taken out of life*. In contrast to many physically disabling illnesses, most of these psychiatric illnesses arise during the teens or twenties. As well, these diagnoses are associated with a very high rate of completed suicide. At least 10% of people with schizophrenia, bipolar disorder or MDD die at their own hand.

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.

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Editor's Notes

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

The editorial board of *EpiNorth* is always working to make the newsletter more relevant and enjoyable to readers. To launch volume 15 and make the navigation of the newsletter a little easier, *EpiNorth's* layout has changed in a few ways. This issue also features four articles dealing with chronic disease.

In the last two centuries, communicable diseases have largely been brought under control due to developments in the areas of public health, hygiene, antiseptics and antibiotics. The resulting increased life expectancy has been accompanied by an increase in the prevalence of chronic disease, including ischemic heart disease, cancer, chronic pulmonary disease and chronic mental illness. In the developing world, progress has been made in identifying risk factors (i.e. smoking, nutrition, lifestyle) for chronic disease, in pinpointing the genetic causes of chronic disease and in treating chronic diseases. In the developing world, while infectious diseases are still rampant, noncommunicable diseases are emerging as major problems due to physical inactivity, smoking and the introduction of Western diets. Primary prevention is needed to address this new pandemic.¹

Chronic diseases are generally incurable, are often caused by a complex interaction of factors, and have a prolonged clinical course.² The *NWT Health Status Report 1999* identifies cancers and circulatory disease together as accounting for almost one half of all deaths in the NWT between 1991 and 1996. It also estimates that nearly one quarter of all deaths due to cancer, circulatory and respiratory diseases are related to smoking.³ The *NWT Health Services Report 2000* forecasts that health care costs in the NWT will rise dramatically over the coming decades because of

expenditures associated with treating chronic conditions. For instance, the cost of treating diseases of the circulatory system, many of which are chronic conditions, are projected to increase by nearly 300% by 2020/21 and move from the seventh to the second most expensive set of conditions to treat.⁴ The first three articles in this issue of *EpiNorth*, as well as *health on.line*, shed further light on various chronic diseases in the NWT.

Dr. Suzanne Perkins has contributed an article on chronic mental health issues in the NWT that emphasizes the need for early recognition and treatment of mental illness. She looks at some of the major mental illnesses affecting people worldwide and then zeroes in on her clinical experience in the NWT. Dr. Perkins has worked in the NWT since 1985, first as a family doctor and then as a psychiatrist.

The article on seniors' morbidity includes excerpts from *A Profile of NWT Seniors 2002*. This report fulfills a commitment made in the *Senior's Action Plan 2002-2003*, to research issues facing seniors. The report indicates that four of the top five reasons seniors are hospitalized relate primarily to chronic disease. It concludes that, along with the programs and services currently offered to seniors, health promotion efforts aimed at changing lifestyle are required to improve the health of seniors in future decades.

Patti Woods, nurse co-ordinator of the hemodialysis unit at Stanton Territorial Health Authority, provides us with an overview of both the hemodialysis unit and the renal insufficiency clinic.

This issue of *EpiNorth* also has the usual variety of articles. Susie Bernier and her colleagues at the Research Group for the Study of Health-Related Behaviours at Laval

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A Profile of NWT Seniors 2002: A Focus on Morbidity

Dave MacDonald, Senior Health Information Analyst, Department of Health and Social Services
 Martha Lamon, Managing Editor, EpiNorth, Department of Health and Social Services

A Profile of NWT Seniors 2002 is the first comprehensive report to describe NWT seniors from a population health perspective. This profile is intended for use in the development and prioritization of programs for seniors. Because this issue of *EpiNorth* focuses largely on chronic health issues, this article will report primarily on the morbidity section of *A Profile of NWT Seniors 2002*.^a In the report, morbidity is explored through an examination of the top reasons for hospitalization, many of which relate to chronic disease.^b

The report looks at health as more than the absence of disease, and defines health as a complete state of physical, mental, social and emotional well-being. As such, a large number of indicators are examined and organized as follows:

Part A – Determinants of Health and Well-Being

- Demographics
- Socio-Economics
- Socio-Cultural Characteristics
- Personal Health Practices

Part B – Health Status and Well-Being

- Subjective Health Status
- Morbidity
- Mortality

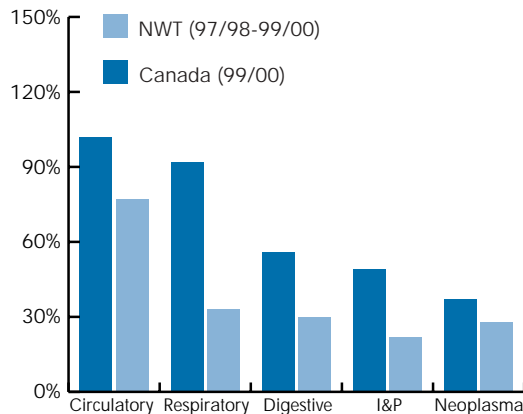
Part C – Service Utilization

- Health Service Utilization
- Drugs (Extended Health Benefits)
- Home Care and Long-Term Care

The profile focuses on explaining why each indicator is reported on and how the NWT senior population compares to younger residents as well as seniors nationally.

The data sources used to report on these indicators are varied and include: Canadian Censuses, Canadian Community Health Survey, NWT Labour Force and Housing Surveys, and NWT Department of Health and Social Services and national administrative databases.

Figure 1: Hospitalization Rate of Seniors (per 1,000) by Main Causes



Sources: NWT Health and Social Services, CIHI, NWT BSTAT, and Statistics Canada

The Top Five Reasons for Hospitalizations

Figure 1 compares the top five reasons for hospitalizations of NWT residents age 65 and over to the rates for the same conditions nationally. For the NWT, these five conditions represent 69% of hospitalizations where a condition was known. The NWT rates are an average annual rate between 1997/98 and 1999/00, while the Canadian rate is from 1999/00. A three-year average helps control for the variances associated with small numbers characteristic of our small northern population.

Diseases of the circulatory system, collectively was the top reason for NWT seniors being hospitalized, at 102 hospitalizations per 1,000 versus 77 per 1,000 population nationally. Respiratory diseases were next at 92 hospitalizations per 1,000. This is nearly three times the national average of 33 per 1,000. Within the senior population,^c these top two causes of hospitalization are also the top two causes of death.

Digestive diseases also figured more prominently among seniors in the NWT at 56 hospitalizations per 1,000 compared to 30 nationally. Injury and

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a The full report will be available on the Department website at www.hlthss.gov.nt.ca in the spring of 2003
 b Hospitalization – where the patient occupies a hospital bed for known or suspected causes is included only. Hospitalization coded to supplementary classifications is excluded.
 c Age 65 and older.

The Hemodialysis Unit and The Renal Insufficiency Clinic

Patti Woods, RN, Cneph(C), Nurse Co-ordinator Hemodialysis Unit, Stanton Territorial Health Authority

The Hemodialysis Unit

Stanton Territorial Health Authority's Hemodialysis Unit opened in May 1996. This three-station unit operates Mondays, Wednesdays, and Fridays. Internal Medicine physicians Drs John Morse and Amy Hendricks provide medical coverage for the unit's activities. Every month, Dr. Campbell, an Edmonton nephrologist, connects via telehealth from the University of Alberta Hospital. A multidisciplinary team approach is used during these sessions to review patient care and develop new plans for care delivery. Since May 2001, Dr. Campbell has conducted on-site visits every six months. During these two-day visits, Dr. Campbell sees patients with renal insufficiency and end-stage renal disease and provides continuing education in-services for doctors and nurses.

Presently, we have five patients receiving hemodialysis. Since the unit opened, 17 patients have been cared for on hemodialysis. The causes of renal failure for these patients are: glomerulonephritis (49%), diabetes (24%), peripheral vascular disease (17%) and other (10%). Patient numbers fluctuate due to kidney transplantation, relocation, or death. From our total census, five remain on hemodialysis at present, seven patients have received a kidney transplant, there have been five deaths, and one patient has relocated. Hemodialysis services are also provided for people with end-stage renal disease who are touring Yellowknife or visiting family and friends. We have had five visiting patients. Two come back every year. One patient was a tourist from Japan.

The Renal Insufficiency Clinic

The Renal Insufficiency Clinic is an expansion of the Stanton Territorial Health Authority Nephrology Program, which got underway in May of 2001. At this time, Internal Medicine

referred six patients to the clinic for follow up and education. One year later, four patients remain in our program, and eight new referrals have been received. This program is consistent with the approach taken across Canada to help delay the onset of dialysis therapy and to initiate dialysis in a timely, organized manner. Receiving treatment before the occurrence of multisystem failure naturally maximizes patient survival.

The Renal Insufficiency Clinic has developed with the support and guidance of the University of Alberta's clinic and the Baxter Momentum Program.^a We provide renal education and monthly follow up on laboratory results and/or other tests and procedures required for renal insufficiency patients in the territories. Our education program is consistent with national standards.

The Multi-Disciplinary Team

We intend to create a system whereby all patients with moderate to severe chronic renal failure in the Northwest Territories can be assessed by a multi-disciplinary team, receive early education and conservative treatment, and delay progression to end stage renal disease and dialysis therapy. Our multi-disciplinary team consists of a nephrologist, internist, nurse educators, dietician, pharmacist and social worker. Each member plays a key role in the success of this program and below is a brief description of their contributions.

- Internal Medicine refers patients to the nephrologist either in Edmonton or, if non-urgent, during her next visit to Yellowknife. The internists also assess the patients' stage of renal insufficiency and refer to the Renal Insufficiency Clinic as necessary.
- The nephrologist assesses the patient's stage of renal failure, investigates the underlying cause, initiates a plan of care for the patient and monitors his/her progress.

^a This is a national education program developed by the Baxter Company.

- Nurse educators organize and provide educational sessions with each patient including time with a dietician, pharmacist and social worker. The dialysis nurse provides information on normal kidney function, stages of progressive renal insufficiency, treatment goals, as well as different treatment methods for end-stage renal disease. Other related functions of the dialysis nurse are monitoring the patient's blood work and health status, contacting various team members should the patient's plan of care require changes, and organizing procedures/ tests that need to be done in Edmonton.
- The dietician discusses with the patient and family members the renal diet plan (i.e. sodium, phosphate, protein and fluid restriction). This is an ongoing process due to the complexity of the renal diet and is one of the key components in delaying the onset of end-stage renal disease. The dietician will often blend a renal diet with other diets when there is a concurrent diagnosis (e.g. diabetes, gout). The dietician faces unique challenges when she has to incorporate Aboriginal/traditional foods into the diet.
- The pharmacist explains the renal medication regime (e.g. phosphate binders, renal vitamins, erythropoietin injections, iron supplements and antihypertensives) and reviews with patients their present medication regimes. The pharmacist must be aware of the Aboriginal traditions/beliefs when he develops the medication regime to ensure the traditional medicines do not interact with the medications prescribed by physicians.
- The social worker discusses with the patient and family lifestyle changes with a chronic illness and ways of coping with these. She also provides information on different resources the patient may need as the renal disease progresses. When patients choose hemodialysis they must relocate to Yellowknife. This is a major issue for patients and the social worker helps them through this process.

The Renal Insufficiency Clinic services are ongoing and are provided to the patients either onsite at the Hemodialysis Unit and/or via telehealth to the communities that have the telehealth connections. Often we use interpreter services to overcome any language barriers in our diversified patient base. By the time a patient reaches the end-stage renal disease, the clinic will have provided enough information for patients to make a well-informed decision about his/her dialysis treatment of choice.

Question & Answer

Glenn Whiteway, Pharmacist, Stanton Territorial Health Authority

Question: I work as a public health nurse and have been advised that clients with a sulfa allergy should not be given the Hepatitis A vaccine because there is Neomycin in it. Is this correct?

Answer: It is a very common misconception that the sulfate in Neomycin sulfate makes it a sulfonamide. It is not, it is just SO₄. Sulfonamides are large molecules with more complex chemical structures. Individuals can have an allergy to sulfite, a preservative, but that's not the same as a sulfonamide allergy.

Neomycin sulfate is an aminoglycoside. Therefore, one should be looking for allergies to Gentamicin, Tobramycin, or Amikacin when screening for allergies as a contraindication for giving Neomycin-containing preparations.

So, a true allergy to a sulfonamide is not a contraindication to receiving a vaccine containing neomycin sulfate.

Predicting Food Choice Behaviour in a Nunavik Community: Developing a Tool for Public Health

Susie Bernier, B.A., Research Associate, Christopher Furgal, Ph.D., Researcher, Jacques Grondin, M.A., Researcher, Public Health Research Unit, CHUL Research Centre (CHUC); Gaston Godin, PhD, Director, Research Group for the Study of Health-Related Behaviours, Laval University, Québec



In light of recent research on the risks and benefits of country foods, many health and environment officials stress the importance for Inuit to maintain or increase country food consumption.^{1,2,3,4} This is based on the knowledge that locally available country foods are healthy, safe and often less expensive than many store food equivalents,⁵ and also the recognition of their important social and cultural value.^{2,6,7} Despite this knowledge, dietary information on changes in country food consumption throughout the circumpolar North has shown an increased use of some store foods, particularly in junk food items.^{8,9} Given the potential health effects associated with these food changes, such as an increased risk for heart disease, diabetes and weight gain,^{10,11,12} and the fact that diet is a modifiable risk factor,¹³ a better understanding of the reasons influencing individuals' food choices is needed.

With this information, regional health workers and decision makers can be better equipped to devise focused scenarios and programs targeted to at-risk groups of the population, such as women of childbearing age and teenagers. The former are more prone to suffer from nutritional deficiencies (e.g. iron, calcium) and the impact of their diet on the fetus and newborn are of great importance. The latter are less inclined to prefer nutrient-rich country foods and are prompted by aggressive marketing strategies to consume nutrient-poor store foods that are available year round, require very little preparation and are thus easy to access and consume.^{3, 9, 14, 15} Teenagers, more than older members of the population, require vitamins and other nutrients found in fruits and vegetables for healthy development. Ultimately, different dietary and promotion strategies are required for different population groups based on their respective food behaviours and needs.

Although economic, environmental and some social perspectives have been used to guide research on diet changes in the past, few studies to date have looked at attitudes, beliefs, food preferences and other factors influencing individual food choices in the North in detail. To our knowledge, no study has yet provided a comprehensive view of the factors influencing diet selection among the Inuit population. Furthermore, no culturally sensitive instrument exists to investigate this view.

Several social cognition models have been tested in southern populations and have shown that food choice behaviours can be predicted.¹⁶ The theoretical factors they measure are easier to change than socio-demographic factors (age, gender), or factors extrinsic to the individual (e.g. availability, cost, etc.) that have been the focus of most studies in the North thus far.¹⁷

Susie Bernier, Gaston Godin, Chris Furgal, Jacques Grondin and Eric Dewailly of Laval University conducted the research project entitled *Food Choices in Nunavik* between 1999 and 2001 in Kuujjuaq, Nunavik. The project, funded by the Department of Indian Affairs and Northern Development (DIAND) and by the Social Sciences and Humanities Research Council of Canada, aimed to develop and validate a survey tool that could determine which factors influence personal food choices in one case community (Kuujjuaq) of Nunavik. The research team collected information on people's opinions and attitudes towards store-bought and country food through focus groups in 1999. They then developed and tested a questionnaire based on this information in the spring of 2001. With the help of several local interviewers, 251 people participated in the final survey conducted in Kuujjuaq during the winter of 2001. The survey's aim was to collect quantitative data on the personal influences as well as specific external

influences on food choice behaviour using Triandis' theory of interpersonal behaviour modified to predict food choices.

According to Triandis, an individual's behaviour is a function of:

- his/her intention to perform that behaviour; and
- the habits of the individual to perform the behaviour, i.e. the frequency with which the individual has performed the act in the past.

An individual's behavioural intent is a function of:

- his/her affect towards performing the act (defined as the personal feelings an individual associates with a particular act, i.e. "For me eating country food is pleasant/unpleasant, healthy/unhealthy.");
- his/her belief about the consequences of performing the behaviour and the evaluation of those consequences;
- the perceived appropriateness of a particular behaviour for:
 - the subject's specific reference groups (norms),
 - persons holding similar positions to those held by the subject in the social structure (roles); and
- the subject's normative beliefs about what s/he should do with regard to the behaviour of interest (personal norms).¹⁸

Finally, in investigating personal choice, one must also consider other conditions that facilitate or hinder individual behaviour, such as the cost of acquiring food (money, effort), potential fear related to the food (e.g. contaminants), and any other external factors not under the control of the individual but that may still influence personal behaviour (e.g. resource availability).

The results of this survey answered the following question: "What are the factors influencing country food and store food consumption in one community of Nunavik and what is their order of importance regarding their effect on intention to consume certain foods?"

The results indicate that participants' choice to eat country food was influenced by (in order of decreasing importance):

1. ease/difficulty of access;
2. feelings associated with the behaviour to eat country food three times a week or more (like/dislike, being tired of it or not);
3. beliefs related to values ("I think I should eat country food three times a week or more.");
4. habit; and
5. attitude (e.g. safe/unsafe, healthy/unhealthy, good/bad).

What made people decide to eat store food were (in order of decreasing importance):

1. personal beliefs related to values ("I believe in eating store-bought food every day.");
2. feelings associated with the behaviour to eat country food three times a week or more (like/dislike, being tired of it or not);
3. ease/difficulty of access;
4. habit;
5. taste for store-bought food; and
6. external barriers/facilitating conditions (e.g. cost, being readily available in stores).

These results are intended to help health officials in planning promotion/prevention activities to effectively target groups of the population regarding specific diet behaviours. For example, based on the results of this work, if the objective is to simply inform people of the potential health effects of exposure to contaminants through country food consumption, various communication methods are best. But, if the desired effect is to promote change in behaviour, planning an intervention based on changing the perceptions people have of how easy or difficult it is to increase or decrease their consumption of a certain country food would have a better chance of success. This could be done for example, by making it easier to access safe and healthy country food species. A practical example is the Nunavik Nutrition and Health Committee's current program to promote Arctic Char consumption among pregnant Nunavik women. A pilot intervention program is making access to Arctic Char easier for this target group. A hypothetical application of this project's findings is the case when there is the need to recommend a decrease in the consumption of a specific country food. Communications based on the health argument alone would likely have little



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The NWT Tuberculosis Control Program: A Year in Review

Cheryl Case, Communicable Disease Control Specialist, Department of Health and Social Services

The year 2002 has been a very busy year for the NWT Tuberculosis Control Program and a lot has been accomplished as a result of implementing the TB Action Plan. The main focus of the TB program is early detection in order to improve the health of those diagnosed with TB and decrease the spread of the disease. Early case detection, contact tracing, surveillance, training, and awareness raising among the general population are integral components of any TB program. These have all been major areas of focus of the *Action Plan to Strengthen Tuberculosis Management and Control in the NWT*.

Since the spring of 2001, most communities have enhanced their TB surveillance and developed a community TB surveillance profile. This has improved early case detection, treatment for those with latent TB infection (LTBI) and TB awareness in general. The positive response and committed work by the healthcare professionals at the community and Authority levels have made these advances possible.

In 2002, there were four new cases of TB reported in the NWT. This is an incidence rate of 10/100,000, a 47% decrease from the previous year (see figure). Nevertheless, this low rate should be viewed with some caution. Due to our small population, the five-year running average incidence rate provides more stable TB rates. For

instance in 2001, there were eight cases of TB reported resulting in a 19/100,000 TB case incidence rate. The five-year running average is 22/100,000 in 1998-2002 and 31/100,000 in 1997-2001.

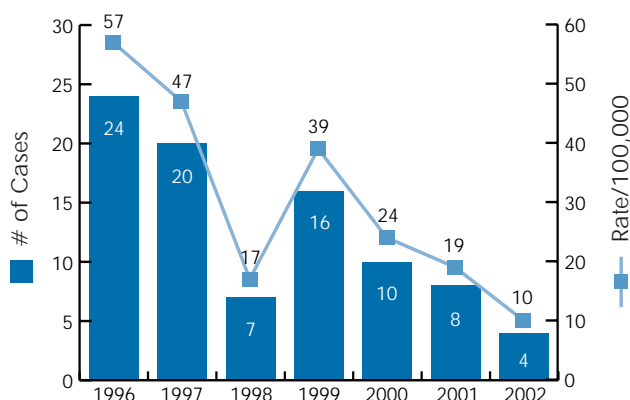
The figure below demonstrates a declining rate since 1999. In 1999, the TB incidence rate was 39/100,000, due to an increased number of TB cases in one Dogrib community. Cases of TB are expected in clients treated for TB before the start of Directly Observed Therapy (DOT) and in those who were not adequately treated for LTBI.

The four TB cases in 2002 can be profiled as follows:

- 1 female 10-19 years, 1 male 20-39 years, and 2 males 40-59 years;
- 2 cases were in immigrants from the Philippines, 1 was non-Aboriginal, and 1 was Dene;
- 3 cases were pulmonary, 1 case had advanced to smear positive and 2 were smear negative; 1 case was extra-pulmonary.

Contact Tracing. Investigating contacts who may have been infected by the source case is another preventative approach in the TB program. In 2001, five reported cases of pulmonary TB were smear positive. These five infectious cases meant that 128 contacts had to have tuberculin skin testing (Mantoux). Because of early intervention, not one infected contact progressed to active disease. Twenty-three contacts had Mantoux reactions indicating recent infection. Seventeen of the 23 infected contacts completed treatment for LTBI. The contact investigation of the two smear negative pulmonary TB cases resulted in 21 contacts having Mantoux tests. Of these, three had reactions indicating infection from the source case. All three infected contacts were successfully treated for LTBI.

Number of TB Cases/Year in the NWT



In 2001, 114 people were treated for LTBI; 84 were treated in 2000. This includes those discovered through TB surveillance and contact tracing. The first priority is to treat all infected contacts so that the disease will not threaten them later in life. The second is to treat those with LTBI who have been inadequately treated in the past. Treating infected contacts prevents the spread of TB. This is the only way to truly eliminate TB.

Surveillance. Since the spring of 2001, all communities in the NWT have enhanced their TB surveillance. The Department is working closely with HSS Authorities to develop a proactive screening program in the NWT. So far, community TB surveillance profiles have been completed in 24 of 32 NWT communities using data from the centralized TB registry. Work is ongoing to complete all community TB surveillance profiles. The surveillance listing identifies high-risk groups. This allows for early case identification and treatment. People inadequately treated for TB in the past or who have chronic conditions such as renal disease, diabetes, or compromised immunity are considered at high risk for developing TB.

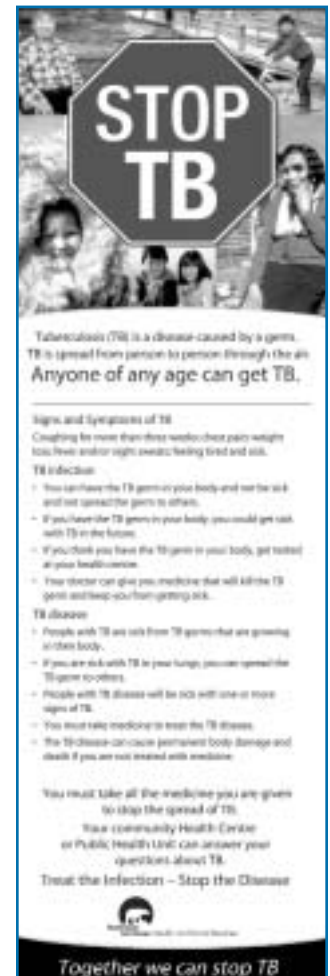
Enhancement of the TB program has impacted staff working in community health centres, laboratories and radiology departments in the NWT. An additional lab technologist has been hired at Stanton Territorial Hospital due to the increased workload in the microbiology unit. The radiology departments are busier and community health centres are having to adjust to the demands of their enhanced TB program.

Training. TB training and orientation for front line staff have been offered by the Department's communicable disease control specialists during community visits. In 2002, visits were made to Aklavik, Inuvik, Fort Liard, Hay River and Rae-Edzo. Five other communities will be covered in the coming year. We appreciate the advanced planning by community health center staff, their commitment to reviewing their TB program with us, and their interest in the educational sessions during our visits.

TB Action Plan Highlights:

- Five physicians attended the TB conference in Edmonton: *Tuberculosis – Elimination/Resurgence* and benefited from three days of advanced TB training with Dr. Anne Fanning and other TB experts in March 2003.
- Five participants from Rae, Wha Ti and Lutsel k'e started training in X-ray procedures at the Rae-Edzo Health Centre on January 6, 2003.
- New TB posters were produced and distributed in 2002. The poster *Stop TB in the NWT* was printed in the eight official languages and sent to every community health centre, public health unit and physician office in the NWT for general distribution in their communities.
- A TB video is being produced in the NWT for launch on March 24, 2003 – World TB Day. The aim of the video is to increase TB awareness among the general population in the NWT and to encourage those at risk for TB to be tested and treated. The video records NWT residents telling their stories about how TB has affected their lives and their families. Health care professionals are encouraged to use this video to educate clients who have been diagnosed with TB, as well as to inform people about the disease so that participation in community TB screening is enhanced. The video will be distributed to all community health centers, public health units, physician offices, schools, and Aboriginal organizations.
- Revisions to the new TB Manual are in the final stages. The manual, titled *NWT TB Protocol*, will be distributed by March 31, 2003. It has a newer look, is completely updated and has additional sections on pediatric TB and surveillance.

These are only highlights of the tremendous amount of work that has been done in the NWT TB Program this year. The continued interest and dedication among health professionals as well as our shared concern to protect Northerners, their families and communities from TB motivates us to keep the goals of the TB Action Plan a priority.



Predicting Food Choice...continued from page 7

effect on changing behaviour if this country food were available for free through the community freezer. In general, we know that people do not choose their food solely on the basis of its value to their health. In this situation, an intervention would be less successful if this information were not considered and factored into health planning.

The same project has been carried out in Nain (Labrador) this year and the data is presently being analyzed. Similar work has also been initiated in Alaska. The data from three regions should allow us to develop a general survey for the North that could be adapted to other regions. For further information on this project, please contact Susie Bernier at: Tel: (418) 650-5115, ext. 5248; Email: Susie.bernier@crchul.ulaval.ca

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Psychiatric Illness...continued from page 1

What Causes Chronic Mental Illness?

There is strong evidence that genetics play an important part in the causation of mental illness, especially of the severe and chronic types. Mental illness tends to run in families. The offspring of two people with schizophrenia have about a 40% chance of being diagnosed with schizophrenia.⁷ The *stress-diathesis model* of mental illness posits that an individual is born with a certain genetic predisposition to illness, which may be brought on, worsened, or alternatively avoided by altering the individual's environment. Stresses that could precipitate or intensify mental illness include

drug or alcohol abuse, loss of a loved one, subjection to physical or sexual abuse, or occupational failure. Conditions that could help prevent or delay the onset of mental illness might include maintenance of good physical health, adequate income and supportive relationships.

The Need For Early Recognition And Treatment

There is some evidence that early recognition (usually in adolescence) of a high risk for or actual signs of mental illness can help prevent serious episodes of mental illness.⁸ Interventions

include enhanced support of such teens through counselling on coping skills, avoidance of substance use, and education about the early signs of an illness episode so that treatment can be started promptly. There is further evidence that if individuals with schizophrenia or bipolar disorder are promptly started and maintained on appropriate medications, they are at lower risk of the secondary disabilities that beset these individuals. These include delay in psychosocial development, derailment of education, ruptured family relationships and the risk of recurrent admissions to hospital.

The Role Of Drug And Alcohol Abuse

Individuals with schizophrenia, bipolar disorder, and MDD are at increased risk of drug and alcohol abuse relative to the general population. In fact, about one third of people with schizophrenia have a concurrent drug or alcohol abuse problem. In 2000, alcohol abuse was a concurrent diagnosis in 39% of patients admitted to the psychiatry ward at the Stanton Territorial Hospital.⁹ Caregivers postulate that such use may be an attempt to self-medicate. In fact, these agents tend to worsen the symptoms in the long term and can lead to frank addiction problems in addition to the primary psychiatric diagnosis. Frequently, a patient may have a first psychotic event while using alcohol or street drugs. This makes it more difficult to identify the underlying cause of the symptoms. The use of street drugs does not cause schizophrenia or bipolar disorder, but may cause an earlier onset and makes the mental illness more difficult to treat.

The Cost Of Chronic Mental Illness

The vast majority of people with schizophrenia spend time in hospital while the minority of those with mood disorders require hospitalization. Some people with chronic mental illness spend most of their mature life institutionalized; many experience a *revolving door* pattern of admissions. Only about 10% of people with schizophrenia are able to work and fully care for themselves in their own home; the proportions are greater in those with mood disorders, which tend to be more episodic. The cost of caring for individuals with chronic mental illness is

substantial, but the cost felt by the individual and his/her family is deeper. This is due to the experience of loss of sense of self, dashed hopes that the aspirations of a young person will be met, and constant worry about the affected family member. Individuals suffering from chronic mental illness are also more prone to medical illnesses as a direct consequence of their prescribed medications and because they are unable to care for themselves properly.

What Can Be Done To Reduce Chronic Mental Illness?

Early intervention is the most effective means of decreasing the devastating financial and personal cost of chronic mental illness. In my work as the Territorial Hospital psychiatrist, I tend to see people late in their illness, often after years of symptoms. Their disability could have been reduced had they received treatment earlier. The nature of most mental illnesses is that patients tend to lose insight about their condition. This means that health care providers, parents, and anyone who works with youth must be alert to the early signs of mental illness so that intervention can be timely.

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Editor's Note:

The Department of Health and Social Services is developing an integrated service delivery model that defines how services will be delivered in the NWT.¹ This model includes a component on mental health and addictions services. This new approach to service delivery identifies the importance of prevention and education in mental health. Prevention workers and community mental health workers will be in a better position to work with families and communities to recognize signs and symptoms of mental illness. Also, enhanced youth assessment and treatment will ensure that youth are identified earlier in their illness minimizing the impact of serious mental illness. For more information on the integrated service delivery model please contact Rachel Dutton-Gowryluk at 867-873-7049.

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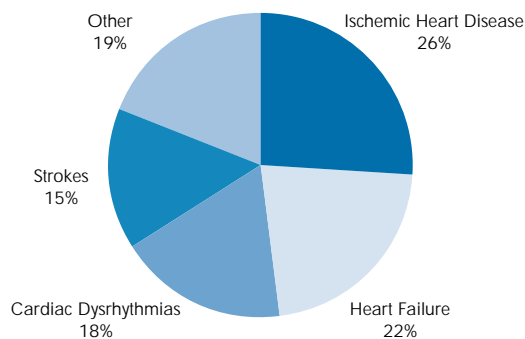
Profile of Seniors 2002...continued from page 3

poisoning (I&P) was double the national rate at 49 versus 22 per 1,000. Finally, neoplasms (cancerous and non-cancerous growths) were higher in the NWT at 37 per 1,000 versus 28 per 1,000 nationally.^d

Circulatory Diseases

For seniors, hospitalization due to circulatory diseases mainly included heart conditions and strokes. Included in heart conditions are ischemic heart disease, heart failure and cardiac dysrhythmias. As seen in *Figure 2*, these conditions accounted for two-thirds of all hospitalizations due to circulatory diseases.

Figure 2: Hospitalization for Circulatory Diseases NWT, 1997/98 to 1999/00



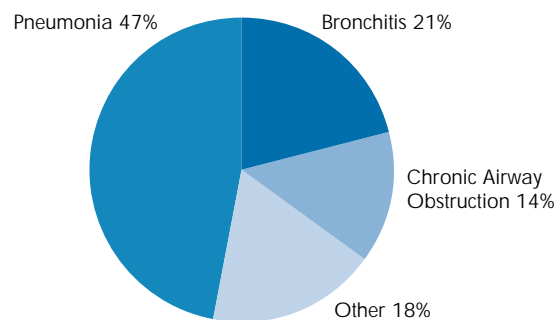
Source: Department of Health and Social Services

Because of the aging population in the NWT circulatory diseases will move into prominence in terms of overall morbidity. Currently, circulatory diseases are approximately seventh in terms of resource use. By 2020, for all ages, circulatory diseases are likely to be second in health care expenditures.¹

Respiratory Diseases

Under the general category of diseases of the respiratory system, the most prominent reasons for hospitalization were pneumonia and chronic bronchitis. As seen in *Figure 3*, various forms of pneumonia accounted for almost half of all hospitalizations. Bronchitis, mainly chronic, accounted for a further 21% of hospitalizations followed by chronic airway obstructions at 14%.

Figure 3: Hospitalization for Respiratory Diseases NWT, 1997/98 to 1999/00



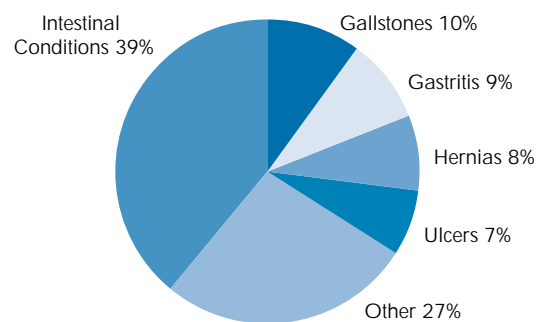
Source: Department of Health and Social Services

Digestive Diseases

Diseases of the digestive system include conditions beginning with the mouth (teeth, tongue and jaw), moving through the stomach area (esophagus, stomach and duodenum), other digestive-related organs (gall bladder, kidneys and liver) and ending in the intestinal area (small and large intestines, colon and anus).

Figure 4 shows that most hospitalizations relating to digestive diseases for NWT seniors were due to intestinal conditions. These conditions include gastrointestinal bleeding, Crohn's disease, noninfectious enteritis, colitis and intestinal obstructions. Gallstones were next at 10%, followed by gastritis at 9%, hernias (abdominal) at 8% and various ulcers at 7%.

Figure 4: Hospitalization for Digestive Diseases NWT, 1997/98 to 1999/00



Source: Department of Health and Social Services

^d It is important to note that hospitalizations do not equal unique individuals as a person can be hospitalized more than once in a year.

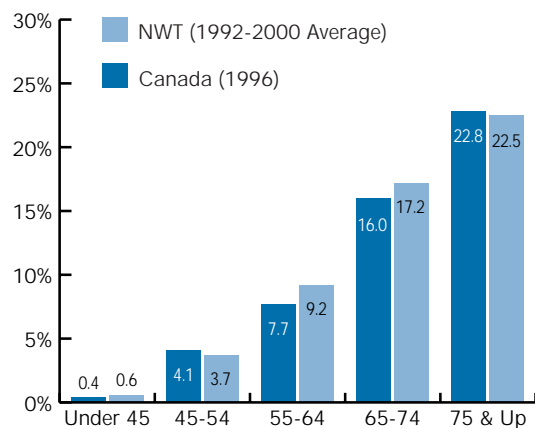
Injuries and Poisonings

Various fractures resulted in 54% of injury-related hospitalizations.^e Most of these fractures were to the lower limbs (leg, ankle, foot etc). Collectively, complications of medical procedures, and problems associated with medical device implants, prosthetics, tissue graphs and transplants were responsible for 14% of injury-related hospitalizations. The remaining third of injury-related hospitalizations were spread across a wide number of injury types to various parts of the body.

Cancers

The NWT Cancer Registry is used in this section to examine cancer incidence in the senior population.^f It is important to note that there were only 245 cases of cancer between 1992 and 2000 in the NWT among people age 65 and over. While this is over a third of cancers for all ages, due to small numbers, care must be taken when drawing conclusions from the following data and discussion.

Figure 5: Cancer by Age, Cases Per 1,000



Sources: Department of Health and Social Services, Statistics Canada, and NWT Bureau of Statistics

Figure 5 shows the incidence of cancer by age for both the NWT and Canada. A nine-year average is used for the NWT since the actual number of cases is very small each year. As seen in Figure 5, cancer incidence increases dramatically with age in both the NWT and Canada. There is not a statistically significant difference between Canada and the

NWT for seniors when all types of cancers are considered together.

While the top three cancers for senior women in NWT are the same as those in Canada, their rank order differs. Colorectal, lung and breast, in decreasing order of magnitude, are the top three cancers in the NWT. In Canada, the top three cancers are the same but breast cancer is first, followed by colorectal cancer and then lung cancer. When the rates for each cancer type are examined, senior women in the NWT have significantly higher rates for colorectal and lung cancers, when compared to the national rates. The difference in rates for breast cancer between the NWT and Canada is not statistically significant. In total these three cancer types account for approximately 64% of all cancers in women age 65 and over in the NWT compared to just over 50% nationally.

The top three types of cancer in senior men in both the NWT and Canada were colorectal, lung and prostate. As with women, the top three types of cancer are the same in both the NWT and Canada, but the order of magnitude differs. In the NWT, colorectal, followed by lung and then prostate account for approximately 67% of all cancer cases afflicting senior men. In Canada, the order is reversed and the top three types of cancer account for approximately 64% of all cancer cases in senior men.

There is a significant difference in rates of colorectal cancer, with the NWT having a higher rate at 5.1 cases per 1,000 compared to a national rate of 3.5 cases per 1,000 for senior men.

Regarding lung cancer in senior men, there was no significant difference between the NWT and Canada. The prostate cancer rate is significantly lower in the NWT at 3.4 cases per 1,000 versus 7.3 cases per 1,000 nationally.^g

Diabetes

There are three types of diabetes: Type 1, Type 2, and gestational. Type 1 usually occurs before age 30, and is the type that affects about 10% of all diabetics. Type 2 generally begins after age 40,

e Less than one percent of all hospitalizations under this general category were related to a poisoning.

f A cancer report is scheduled for public release in 2003.

g The age-standardized rate for colorectal cancer for the entire NWT male population is significantly higher than for Canada for the same time periods. The age-standardized rate for prostate cancer is significantly lower in the NWT than it is nationally for all males combined. NWT Department of Health and Social Services, Cancer Statistics: NWT 1992-2000 (May 2002, unpublished).

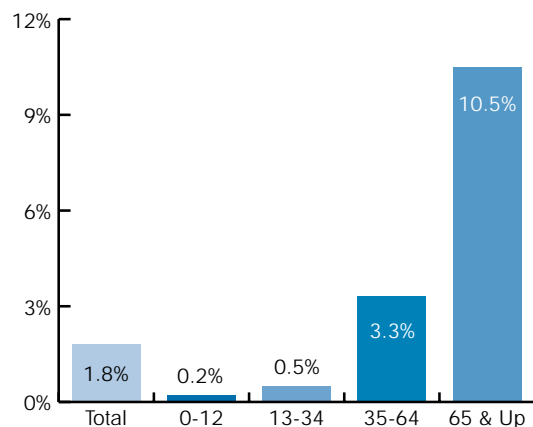
“NWT seniors compare favourably to seniors nationally on several health status measures and there is evidence pointing to their health status rising over the next 20 years.”

though is increasingly occurring in younger ages, and accounts for about 90% of all diabetics. Gestational diabetes occurs during pregnancy and ends after giving birth. Nevertheless, 40 to 50% of women with gestational diabetes will develop Type 2 diabetes within the next 15 years.²

Type 2 diabetes is of greatest concern to an aging population in the NWT. Generally, Type 2 diabetics tend to be overweight or obese and have a sedentary or inactive lifestyle. A family history of diabetes increases the risk of developing the disease. Aboriginal populations in southern Canada and the United States have higher prevalence rates of diabetes than the general population. This trend is expected in the NWT if traditional life styles diminish and eating patterns continue to change.³

The NWT is participating in a project to develop a national diabetes registry.^h Currently, data required to determine the rate of diabetes in the NWT are incomplete. A 1997/98 study of diabetes in the NWT does provide a snapshot of the scope of the problem in the senior population.

Figure 6: Estimated Proportion of Population with Diabetes by Age, NWT, 1997/98



Sources: Department of Health and Social Services, Statistics Canada, and NWT Bureau of Statistics

Figure 6 shows the proportion of the population with diabetes as of 1997/98.⁴ These numbers are estimates, based on one year of data only, and have been reworked with subsequent changes to population estimates.

With the aging population, it is likely that the overall rates of diabetes will increase in the NWT. Analysis by ethnicity was done for the entire NWT population, with 1997/98 data. The rates in Inuit and Dene populations were lower than the rates in the non-Aboriginal population.⁴ It is possible that the Aboriginal population concentrated outside of Yellowknife and regional centres has a more traditional (healthy) diet and lifestyle than the non-Aboriginal and Metis populations concentrated in Yellowknife and regional centres. People living most of their lives in larger communities have historically had greater access to a Western diet characterized by highly processed, packaged and fast foods. They also tend to have a less active, less traditional lifestyle.

The prevalence of diabetes in the population age 65 and over is likely to increase over the next 10 to 20 years. Much of this increase is anticipated to occur in the Aboriginal population.

Due to the erosion of traditional diet and lifestyle patterns in the NWT, the Aboriginal senior population of tomorrow will differ in many aspects from their peers today. Diets rich in traditional foods are likely to become less common for tomorrow’s seniors and their activity levels are expected to diminish.

It is important that health promotion efforts provide additional focus on seniors in the area of lifestyle choices. Maintaining a healthy physique, with low body fat weight, through a good diet (low in fat and sugar, high in fiber) as well as an active lifestyle can help to prevent adult onset diabetes. What is key to prevention is also the key to managing adult onset diabetes once afflicted. People with adult onset diabetes who neither get treatment nor properly manage their condition run the risk of serious complications including: heart disease and stroke, blindness, limb amputations, kidney disease and erectile dysfunction.⁵

Conclusion

A Profile of NWT Seniors 2002 provides a broad look at the health of NWT seniors at the turn of the century. NWT seniors compare favourably to seniors nationally on several health status measures and there is evidence pointing to their health status rising over the next 20 years.

h The national diabetes registry is one of the goals of the National Diabetes Surveillance System – part of the Canadian Diabetes Strategy.

NWT seniors can expect to live as long as their national counterparts. Life expectancy at age 65 has been rising over the last decade both nationally and in the NWT.

Future seniors, those currently in their 40s and 50s, will generally have higher levels of education and potentially greater sources of retirement income, than today's senior population. These factors may enhance their diet and lifestyle and, consequently enhance health outcomes.

Conditions such as heart disease and stroke, Type 2 diabetes, colorectal and lung cancer, and some digestive and respiratory diseases take decades to develop. Furthermore, such conditions are often

the result of poor lifestyle choices. With healthier lifestyles, many of these conditions are preventable or can be delayed.

The Department of Health and Social Services, along with other departments, targets children, youth and adults through health promotion programs such as Early Children Development, Active Living and Action on Tobacco. Although lifestyle is often the product of habits formed in one's younger years, people at any age can benefit from positive lifestyle changes. Successful health promotion will lead to healthier seniors in future decades.

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Editor's Notes...continued from page 2

University, Québec report on research they undertook on what reasons people from a community in their region use to choose to eat either store-bought or country foods. With this information they can better target their health promotion efforts in the areas of nutrition and contaminants.

The Department of Health and Social Services launched the *Action Plan to Strengthen Tuberculosis Management and Control in the NWT* in 2001 with the goal of reducing the NWT's TB rate to the national level of five cases per 100,000 population by 2005. Cheryl Case, a communicable disease control specialist with the Department, gives us an update on accomplishments over the past year.

Elizabeth Cook, a nurse practitioner instructor with Aurora College, describes the important work of the Maternal Perinatal Committee. This committee reviews circumstances surrounding the deaths of mothers and newborns during deliveries that occur in the NWT or by NWT residents delivering out of territory. The committee then makes recommendations to improve the care of mothers and newborns in the NWT.

Jennifer Carey, evaluation specialist with the Department of Health and Social Services, is back with her series on online resources. In this issue, she highlights four websites focusing on diabetes.

Wanda White reports on the sexual abuse and sexual assault information workshop held in Yellowknife in November 2002. She highlights the challenge presented to frontline providers in meeting the needs of clients who are sexually abused or assaulted. She outlines recommendations made during the workshop that are intended to standardize and enhance services in the NWT.

Feedback on what is being done well and what could be done better in *EpiNorth* is always appreciated. Please drop us a line if you have any comments.

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The Chronic Disease Prevention Alliance of Canada was created in 2001 to strengthen linkages among established, new, and emerging chronic disease prevention initiatives in Canada. It is a network of organizations and individuals with a common vision for an integrated system of chronic disease prevention in Canada. The Alliance aims to facilitate access to resources that can be used to build awareness and improve understanding of the burden of chronic disease and the system changes required to reduce chronic disease in Canada. To find more out about the Alliance visit their website at www.chronicdiseaseprevention.ca

Diabetes

The World Health Organization estimates that the number of people with diabetes in the world will reach an alarming 300 million by 2025.¹ Currently, more than 2 million Canadians live with this chronic disease and it has become a leading cause of death within Canada.²

Given the number of people with and affected by diabetes around the globe, it is no wonder that the Internet has become an invaluable tool for diabetes research, education and advocacy. This article will focus on some of the key websites dedicated solely, or in part, to diabetes.

www.diabetes.ca

This website for the Canadian Diabetes Association (CDA) is the most comprehensive online resource for people with and affected by diabetes, as well as for healthcare professionals treating those affected by it.

Clicking on the *About Diabetes* section will give diabetes facts and strategies for living with and managing the disease. For healthcare professionals working to improve the lives of people with diabetes, clicking on the *Professionals* section will provide excellent information on diabetes education, research and clinical care.

This site even includes a section specific to the Canadian Aboriginal population. The *Programs and Services* section provides a link to the *Aboriginal* section. This was developed to offer information and updates about the CDA's Aboriginal Program, as well as to provide access to many other diabetes resources, community initiatives and contacts specific to Canada's Aboriginal population.

What is most useful about this site is that each web page can be printed out in a print-friendly version to ensure that the browser gets all the information. This, of course, brings the Canadian Diabetes Association closer to reaching its goal of becoming "the online resource for diabetes."³

www.diabetes.org

This website is the American counterpart to the Canadian Diabetes Association. Although very similar in terms of the basic diabetes information that it provides, the American Diabetes Association website seems to provide more interactive and user-friendly links. Not only does the website include tips and recipes of the day, it also provides a link to subscribe to their health and wellness magazine, *Diabetes Forecast*. You can also register for its weekly e-newsletter *Diabetes E-News Now!* to stay up to date with the news and events occurring in the world of diabetes.

www.hc-sc.gc.ca/fnihb/cp/adi/

This federal government website provides a direct link to the Aboriginal Diabetes Initiative. This initiative aims to address the diabetes epidemic in many Aboriginal communities and is part of the larger five year Canadian Diabetes Strategy which began in the 98/99 fiscal year and ends in the 03/04 fiscal year.

The website provides links to the following:

- consultations undertaken to guide the development of the program;
- resources used to support the Initiative including a diabetes fact sheet;
- projects that the initiative will fund both on-reserve and off-reserve, combined with a regional contact list; and
- an extensive listing of other on-line links within the Government of Canada as well as related non-governmental and international links.

All in all, this federal website is useful not only in providing information about the Aboriginal Diabetes Initiative, but also in providing information about the disease itself, as well as other community programs related to the health of Aboriginals.

www.ayn.ca/health/

The Aboriginal Youth Network is a great website for children, adolescents, and young adults who

want to learn about diabetes and other pertinent issues facing today's Aboriginal youth. Laid out in a visually appealing, conversational-style format, children of all ages will find the facts without the academic jargon that often surrounds such important topics as diabetes, puberty, and addictions. Although a direct link to diabetes was not provided, a wealth of information related to the disease can be found by clicking on the Wellness section.

A key supporter of the Aboriginal Youth Network website is the Kids Help Phone. Its number (1-800-668-6868) as well as its website (<http://kidshelp.sympatico.ca>) are provided at the bottom of each web page within the website.

You can be sure that the websites provided above will either directly provide you with the diabetes information that you are looking for, or will at least send you off in the right direction.

Happy surfing!

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IN brief... The NWT Maternal and Perinatal Committee

Elizabeth Cook, RN(EC), BScN, Member, NWT Maternal and Perinatal Committee

This article introduces *EpiNorth* readers to the work of the NWT Maternal and Perinatal Committee. It describes the mandate of the committee and how the work of the committee is relevant to health care providers in the NWT.

The mandate of the NWT Maternal and Perinatal Committee is to review the circumstances surrounding all cases of maternal and perinatal mortality, as well as selected cases of morbidity involving residents of and/or births, that occurred in the NWT. Committee membership consists of obstetrical and pediatric specialists, a family physician, the Chief Medical Officer of Health, a community health nurse or nurse practitioner, a nurse educator, and one other member with special expertise relevant to cases under discussion.¹ The committee derives its mandate directly from the Minister of Health and Social Services and makes recommendations for improvement in the care of mothers and newborns in the NWT.

When there is a maternal or perinatal death, the *Study of Perinatal Deaths* form² must be completed and submitted to the chairperson of the committee. At monthly meetings, cases of maternal/perinatal death are brought forward for review and discussion. The purpose of the discussion is to determine if there was any point at which death could have been avoided. Recommendations are also made regarding educational programs for physicians and nurses who provide care to pregnant women. The committee reviews approximately ten to fifteen cases each year. Some of these are patients from Nunavut who have delivered in the NWT. Since division, the committee is careful to identify those from Nunavut to ensure that the statistics generated are specific to the NWT.

The committee may also take on certain projects. One recent initiative was the development of the new NWT Prenatal Record form.³ The committee gathers input from users of the form and welcomes feedback and suggestions for change.

This committee is one of several that contribute to the Clinical Practice Information Manual. Communication of territorially-approved clinical practice standards and guidelines are co-ordinated through this manual.

This committee makes an important contribution to upholding the philosophy of the Primary Health Care principles of health promotion and illness/injury prevention. Health care providers are encouraged to use the information provided

by the committee to guide their care. For more information about the work of the committee, please contact the Office of the Chief Medical Health Officer, or the Committee Chair, Dr Nicole Chatel.

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CONFERENCES & Workshops

Sexual Abuse and Sexual Assault Information Workshop

Wanda White, Communicable Disease Specialist, Department of Health and Social Services

The Department of Health and Social Services and Status of Women Council of the NWT co-chaired a planning session to follow-up on the priorities identified during the November workshop. Participants committed to developing a protocol handbook by April 2003. Including protocols in the handbook ensures that individuals have clear direction and an understanding of their roles and responsibilities in reporting and investigating child abuse or neglect. Clearly articulated roles and responsibilities allow all staff to concentrate on the needs of children and families and provide for a system that works with compassion, trust and respect.

Sexual abuse and sexual assaults occur frequently in the NWT and often present as a crisis to care providers. These situations are challenging and stretch the capacity of service providers and of the current system. Guidelines and standards for sexual abuse and sexual assault services exist, but are from three different professional perspectives: health, social services, and justice. These standards are in four different documents and are not readily apparent to the professionals at the field level.^{1, 2, 3, 4}

During service delivery, frontline workers have identified gaps in sexual abuse and sexual assault services, expertise, and resources. These workers requested more support, education and skill development around this issue.

A one day Sexual Abuse and Sexual Assault Information Workshop was held on November 6, 2002. The objectives of the workshop were:

1. to increase awareness and knowledge of child sexual abuse,
2. to increase awareness and knowledge of sexual assault,

3. to enhance and promote greater standardization of sexual abuse and sexual assault services in NWT.

Two hundred people attended the workshop including frontline and departmental health, social services, education and justice staff, as well as staff from various nongovernmental organizations.

The workshop consisted of six major presentations and a discussion period to decide next steps.^a Presenters included: 1) Dr. Lionel Dibden a pediatric sexual abuse specialist from Edmonton; 2) Les Harrison, the senior social worker from Yellowknife Health and Social Services Community Health Programs; 3) Dawn McInnes of the Department of Justice, and Marie Speakmen and Dorothy Carseen of Victims' Services; 4) Kathleen Soltys, manager of the Edmonton Sexual Assault Response Team; 5) Detective Lexine Sedore of the Edmonton Police; and 6) Shannon Gullberg, legal counsel contracted by the Department of Justice.

a Copies of all presentations are available from the Department of Health and Social Services at 867-920-8646.

Dr. André Corriveau, the Chief Medical Health Officer, and Mr. Dana Heide, the Director of Child and Family Services, facilitated a discussion around next steps and gave closing statements. Workshop participants endorsed the following recommendations:

1. Guidance and advice from a pediatric sexual abuse expert should be available to NWT care providers 24 hours a day, 7 days a week. Communication tools such as telephone, digital camera and telehealth could help provide such access.
2. Specially trained sexual abuse and assault teams should be set up in larger communities and be accessible to smaller communities.
3. Sexual assault guidelines should be updated and combined with current protocols to ensure they are comprehensive and readily accessible to frontline workers.
4. The current NWT Child Abuse Protocol should be updated as soon as possible.
5. Woods Lamps and Toluidine Blue (equipment required during a sexual assault physical exam) should be available in each health centre.
6. Clinical practice guidelines are needed around the issue of post exposure prophylaxis for HIV and Hepatitis B following sexual assault incidents.
7. Enhanced support is required for all children going through the interview and court process.
8. Training on child interviewing should be available to all RCMP and child protection workers.
9. Continued education on the use of sexual assault kits and on issues around sexual assault is required for all health practitioners. A pool of nurse practitioner expertise should also be developed through sexual assault nurse examiner training.
10. Increased access to trained interpreter services is needed.
11. Increased counselling and support services to sexual abuse and sexual assault victims are needed.
12. Consideration should be given to using Elders for support and counselling in and out of court when staff shortages exist.
13. A rape centre or abuse centre should be developed in the NWT.
14. The Department of Health and Social Services should develop a more systemic process for dealing with sexual assault and sexual abuse.

The Director of Child and Family Services made the commitment to lead the next steps and initiate a meeting to address the recommendations with their partners within this fiscal year. Nevertheless, the impact of this issue on society demands that addressing it is everyone's responsibility.

REFERENCES

- 1 Northwest Territories. Department of Justice. *Sexual Assault: A Help Book for Teens in the Northwest Territories*. Yellowknife: Culture and Communications, 1992.
- 2 Northwest Territories. *Sexual Abuse Handbook*. Yellowknife: Department of Health and Social Services, 1996.
- 3 Northwest Territories. *The Child and Family Services Standards and Procedures Manual*. Yellowknife: Department of Health and Social Services, 1998.
- 4 Northwest Territories. *Communicable Disease Manual*. Yellowknife: Department of Health and Social Services, 2000.
- 5 Family Violence Statistics Report. Yellowknife: Department of Health and Social Services, 2002.
- 6 Health Protection Unit Registries. Department of Health and Social Services, 2001
- 7 CHMIS, 2002.

Background:

- The RCMP reported over 400 cases of sexual assault for 2000 and 2001.⁵
- In the last five years, sexually transmitted diseases in children 12 to 15 years of age have more than doubled from 44/year to 90/year.⁵
- In the last five years, 15 children under 12 years of age were reported with a confirmed sexually transmitted disease.⁶
- Since 2000, child protection workers have investigated 350 suspected cases of sexual abuse.
- Health Centres report seeing approximately 300 to 350 people on a yearly basis for assessment and counseling of sexual abuse or sexual assault.⁷
- In the last 12 months, six communities have reported multiple incidents of suspected sexual abuse and reports of sexual assaults are ongoing.

NOTIFIABLE diseases

for the Northwest Territories (NWT) October 2002 - December 2002^a

		October - December 2002	Cumulative Totals - 2002
		NWT	NWT
<i>Vaccine Preventable Diseases</i>	Hepatitis B	0	2
	Haemophilus Influenzae	0	1
	Influenzae A	1	13
	Influenzae B	0	0
	Pertussis	0	13
<i>Sexually Transmitted/ Bloodborne Diseases</i>	Chlamydia	171	601
	Gonorrhoea	29	124
	Hepatitis C	9	33
	Hepatitis, Other	0	1
	Syphilis	0	0
<i>Diseases by Direct Contact/ Respiratory Route</i>	Chicken Pox	15	82
	Invasive Group A Strep	2	6
	Invasive Group B Strep in neonates	0	1
	Invasive Pneumococcal Disease	3	10
	Legionellosis	0	0
	Listeriosis	0	1
	Meningitis, Other Bacterial	0	0
	Meningitis, Unspecified	0	1
	Meningitis, Viral	0	0
	Meningococcal Infections	0	0
	Respiratory Syncytial Virus	4	42
	Tuberculosis	0	4
	<i>Enteric, Food and Waterborne Diseases</i>	Botulism	0
Campylobacteriosis		2	10
Cryptosporidiosis		0	0
E.Coli O157:H7		0	2
Giardiasis		1	10
Hepatitis A		0	0
Salmonellosis		1	8
Shigellosis		0	3
Tapeworm Infestation		1	2
Trichinosis		0	0
Yersinia		0	2
<i>Vectorborne/Other Zoonotic Diseases</i>	Brucellosis	0	0
	Malaria	0	0
	Rabies Exposure	4	15
<i>Antibiotic resistant microorganisms</i>	Methicillin-resistant Staph.Aureus	1	4
	Vancomycin-resistant Enterococci	0	0

NWT HIV Infections Reported from 1987 to 2002

Total	<i>Age Group at Diagnosis</i>								<i>Gender</i>		<i>Risk Category</i>					
	0-9	10-14	15-19	20-29	30-39	40-49	50-59	60+	Female	Male	MSM ^b	MSM/ IDU ^c	IDU	Hetero-sexual	Perinatal	Blood Products
23	1	0	0	4	12	5	0	1	2	21	11	1	5	4	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